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Annual Report
of the
President
of the
Borough of Queens
1914

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ANNUAL REPORT

OF THE

PRESIDENT

OF THE

BOROUGH OF QUEENS

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MAURICE E. CONNOLLY, PRESIDENT

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PRESIDENT, BOROUGH OF QUEENS

Hon. JOHN PURROY MITCHEL,

Mayor of The City of New York:

DEAR SIR—Pursuant to the provisions of the Charter of The City of New York, I transmit to you the annual report of the operations of the President of the Borough of Queens for the year ending December 31, 1914.

Yours very truly,

MAURICE E. CONNOLLY,

President, Borough of Queens.

352138

C.D. 16, Nureck (g) 1914 Cont.

KMS 221a 17

THE CITY OF NEW YORK
OFFICE OF THE PRESIDENT OF
THE BOROUGH OF QUEENS

MAURICE E. CONNOLLY, *President.*

The Charter of The City of New York provides that the President of the Borough is required to submit to the Mayor a report showing the operations of the various departments under his supervision. A summarized report for the fiscal year ending December 31, 1914, has been prepared and is herewith transmitted.

At the time of consolidation the City of Greater New York was divided into five boroughs for the purpose of administering the functions of government that were local in character. Each borough elects a President who serves for four years. The Borough President has control of the grading, curbing, flagging, guttering, paving, repaving and repair of all streets in his borough, the laying and relaying of all surface railroad tracks, the filling of sunken lots and the fencing of vacant lots, licensing of sub-surface vault space. The removal of encumbrances, and the issuance of permits to use and open streets for the purpose of building construction also come under his jurisdiction. He has charge of the construction and maintenance of all tunnels and bridges except those over navigable streams; the building and supervision of sewers, approval of plans and supervision of construction and alteration of buildings; the construction, repair, cleaning and maintenance of all public buildings in his borough (except school houses, alms houses, penitentiaries, police and fire stations); the care and cleaning of all offices occupied for public use referred to; the location, establishment, care and direction of public baths, public urinals, public comfort stations; and the placing of street signs. In the Borough of Queens the president also has jurisdiction over the cleaning of streets and the removal of ashes and garbage.

The office of the Borough President is subdivided into bureaus, each of which has its separate functions to accomplish and may be considered as a unit in making up this report. They are known as Highways, Sewers, Street Cleaning, Public Buildings and Offices, Topographical, Substructures and Franchises and the Bureau of the Supervision of Building Construction and Alteration.

The object of this report is to furnish general facts concerning the operation of these bureaus. Beginning with General Administration and its various subdivisions, this report will show an outline of the duties of each department and the operations which have been carried on during the year 1914, in order to fulfill these duties.

GENERAL ADMINISTRATION.

The main offices of the department are situated in the Borough Hall, 55 Jackson avenue, Long Island City. Besides the offices of the President, the Consulting Engineer, the Commissioner of Public Works and the Secretary of the Borough, there is located in this building the Local Board. These offices constitute what is called General Administration.

LOCAL BOARD.

For the purpose of home rule and local improvements The City of New York is divided into twenty-five districts of local improvements. In each of these districts

is a board of local improvements, known as the Local Board, entrusted with the power prescribed for the district by the City Charter. This board has jurisdiction over those subjects or matters the cost and expenses whereof are in whole, or in part, a charge upon the people or property of the district or part thereof except in so far as jurisdiction may be otherwise given by the Charter of The City of New York over matters of local administration within such district.

Each local board consists of the President of the Borough wherein the district is situated, and each member of the Board of Aldermen who represents an aldermanic district. The action of this board is by resolution subject to the procedure governing resolutions passed by the Board of Aldermen and conformable thereto.

There are two local boards in the Borough of Queens. During the year 1914 these two districts considered 493 petitions for local improvements, of which 377 were initiated at an estimated cost of \$3,527,511.09. A more detailed statement explaining these petitions appears at the end of this chapter.

CIVIL SERVICE DIVISION.

The numerous changes that are annually made in the office of the President of the Borough of Queens require that a bureau be maintained in order to record these changes. This bureau consists of a clerk in charge and a stenographer, whose duties are the handling and recording of all appointments, transfers, resignations or any other changes that are made in the force employed.

During the year 1914 there were recorded in this bureau 330 changes made in the competitive class and 337 changes made in the labor class, giving a total of 667 changes made during the year.

MAILING AND FILING DIVISION.

During the year 1914 about 7,000 pieces of mail were received in the administration offices of the borough. This correspondence had to be delivered to the various bureaus in the departments and properly noted, after which same were returned for filing. This work was accomplished by a clerk in charge and two assistants. They also dispose mail sent out, which is equally as large as that received.

PURCHASES AND SUPPLIES.

All materials and supplies are purchased through the Division of Purchase and Supplies. When requisition is made to the Purchasing Agent for material or supplies needed, he obtains bids from the various dealers and issues an order for delivery of the same from the lowest bidder. Samples of materials, catalogues for same and records for dealers also are kept by him. He is assisted by one clerk and one stenographer. During the year 1914 there was issued by him 3,270 orders, which amounted to the sum of \$338,103.15 from all funds.

CONTRACTS.

The Division of Contracts advertises for and receives bids on different contracts to be let by the department. When bids are received, contracts are let in accordance with law and proper records are made.

During the year 1914 128 contracts at a total cost of \$1,315,156.31 were let in this office.

AUDIT AND ACCOUNTS.

The administration of appropriations and bond fund accounts in the borough requires that a staff of clerks and bookkeepers be maintained to keep a correct record of the transactions arising from these accounts. A record is made of orders and contracts issued and payments made in order that the expenditures do not exceed the appropriation allowances. This staff is known as Audit and Accounts

and consists of a general bookkeeper, a clerk and bookkeeper and several other clerks.

In addition to the keeping of the above mentioned records, this division prepares statistical information as desired. This includes the keeping of cost data such as costs of operation and maintenance of various bureaus in the department. A statement of these costs appears in this report for 1914.

The Payroll Division also comes under this heading. This division keeps all the time records and makes up all payrolls for the borough.

In their proper order will appear a statement showing the conditions of the appropriation and bond fund accounts on December 31, 1914, a trial balance of the ledger accounts, a summary of the quarterly reports issued for the year 1914, and a statement showing the cost of operations and maintenance of the various bureaus during the year. In this last statement the Bureau of Substructures and Topographical Bureau appear under one heading.

OPERATIONS OF THE LOCAL BOARD.

Number of Petitions Considered.					Improvements Initiated.				Kind.	Total Estimated Cost of Works Initiated.
1st Quarter.	2d Quarter.	3d Quarter.	4th Quarter.		1st Quarter.	2d Quarter.	3d Quarter.	4th Quarter.		
17	34	19	11		16	28	3	10	For sewer construction.....	\$2,358,414.33
4	2	..	3		4	2	..	2	For house connection drains.....	8,975.00
1	6	1	2		1	5	1	2	For basins in accordance with Section 435 of the Greater New York Charter.....	10,613.76
..	..	1	..		..	..	..	..	For regulating and curbing.....	..
43	30	20	7		26	20	10	5	For regulating, grading and curbing.....	4,200.00
..	8	6	4		..	8	4	3	For regulating, grading, curbing, laying sidewalks, etc.....	857,240.00
4	..	..	..		1	..	..	..	For paving (asphalt block).....	170,160.00
9	7	..	..		6	6	..	..	For regulating, grading, curbing, laying sidewalks and paving.....	14,100.00
1	18	1	..		1	18	1	..	For laying sidewalks in accordance with Section 435 of the Greater New York Charter.....	90,150.00
14	11	9	3		13	6	2	2	For acquiring title.....	13,658.00
9	..	..	..		5	..	..	..	For amending or discontinuing proceedings, etc.....	..
7	9	7	..		5	7	1	..	For changing map.....	..
..	..	1	..		..	..	..	..	For closing.....	..
12	15	11	4		12	14	11	4	For water.....	..
33	33	17	22		33	33	17	21	For gas and electricity.....	..
1	9	1	2		..	5	..	1	Miscellaneous.....	..
155	182	95	61		123	152	50	52		\$3,527,511.09

LIST OF APPOINTMENTS, TRANSFERS, RESIGNATIONS, ETC., IN THE BOROUGH OF QUEENS
YEAR OF 1914.

	Competitive Class.	Labor. Class.
Appointments—		
Permanent	57	25
Provisional	3	..
Temporary	30	10
Temporary positions made permanent.....	4	..
Transferred—		
From other bureaus	15	12
Interdepartment transfers	39	55
Temporary assignments	8	..
Promotions	23	2
Increases allowed	19	24
Decreases made	3	3
Declination of appointment.....	3	..
Suspensions—		
Lack of work.....	49	25
End of temporary period.....	13	4
Other causes	2	3
Leave of absence—		
Without pay	10	35
With pay (injuries received in performing duties).....	2	15
With one-half pay (serious illness).....	1	..
Reinstated	3	2
Reassigned	13	65
Resignations	16	9
Vacancies caused by deaths.....	5	34
Services ceased	10	3
Dismissals	2	11
Total changes made.....	330	337

CONTRACT AND OPEN MARKET ORDERS ISSUED DURING 1914.

Month.	Num- ber.	Appro- priations.	Special Revenue Bonds.	Corporate Stock.	Special and Trust Funds.	Total.
January	251	\$11,953.53	\$276.95	\$2,740.94	\$2,553.12	\$17,524.54
February	150	7,438.17	42.55	438.73	200.00	8,119.45
March	262	12,064.90	11.00	1,149.18	161.55	13,386.63
April	247	29,943.93	.....	1,024.00	.....	30,967.93
May	333	37,881.32	.....	1,687.43	20.00	39,588.75
June	365	65,123.93	.....	394.78	869.15	66,387.86
July	298	47,782.69	.....	1,067.56	498.60	49,348.85
August	261	19,666.64	.....	518.47	628.20	20,813.31
September	217	31,478.52	.....	540.00	734.55	32,753.07
October	328	18,183.99	.....	187.60	698.05	19,069.64
November	258	11,589.23	.....	146.00	372.00	12,107.23
December	300	26,883.54	.....	840.50	311.85	28,035.89
	3,270	\$319,990.39	\$330.50	\$10,735.19	\$7,047.07	\$338,103.15

CONTRACTS AWARDED DURING YEAR 1914.

Month Regis- tered.	Number of Contracts.	Appro- priations.	Special Revenue Bonds.	Corporate Stock.	Total.
January .....	..	.....	.....	.....	.....
February	33	\$5,514.60	.....	\$239,860.58	\$245,375.18
March	24	95,590.88	.....	337,054.42	432,645.30
April	16	33,593.97	.....	50,247.35	83,841.32
May	12	34,852.61	.....	44,159.70	79,012.31
June	15	.....	.....	135,096.51	135,096.51
July	5	7,245.00	.....	77,140.23	84,385.23
August	2	12,075.00	.....	18,742.50	30,817.50
September	4	10,194.95	.....	41,736.70	51,931.66
October	7	3,437.50	.....	101,894.77	105,332.27
November	2	4,740.00	.....	2,950.00	7,690.00
December	8	2,840.10	\$12,130.00	44,058.93	59,029.03
Totals	128	\$210,084.62	\$12,130.00	\$1,092,941.69	\$1,315,156.31

CURRENT FUND ACCOUNTS.

Balance of appropriations 1913 and prior years, December 31, 1913.....	\$147,788.02	
Amount transferred to General Fund during 1914	36,919.13	
Net appropriations 1913 and prior years avail- able 1914	\$110,868.89	
Appropriations for year of 1914.....	2,066,981.64	
Total appropriation accounts.....		\$2,177,850.53
Net vouchers issued against 1913 and prior years	\$99,696.96	
Net vouchers issued against 1914 appropria- tions	1,937,376.46	
Total expenditures from appro- priations		2,037,073.42
Unexpended balance December 31, 1914.....		\$140,777.11
Unexpended balance 1913 and prior years.....	\$11,171.93	
Unexpended balance 1914 appropriations.....	129,605.18	
	\$140,771.11	

RESERVES.

Outstanding liabilities against 1913 and prior years	\$389.07	
Outstanding liabilities against 1914 appropria- tions	109,712.69	
Total amount reserved for liabil- ities		110,101.76
Unencumbered balance December 31, 1914....		\$30,675.35
Unencumbered balance 1913 and prior years..	\$10,782.86	
Unencumbered balance 1914 appropriations....	19,892.49	
	\$30,675.35	

SPECIAL REVENUE BOND FUND ACCOUNTS.

Unexpended balance of Special Revenue Bond Fund Authorization December 31, 1913....	\$11,414.06	
Amount Special Revenue Bonds Authorization year 1914	64,326.62	
Total Special Revenue Bond Funds available 1914.....		\$75,740.68
Amount of Special Revenue Bond Funds ex- pended 1914		54,158.56
Unexpended balance December 31, 1914.....		\$21,582.12

CORPORATE STOCK FUNDS ACCOUNTS.

Unexpended balance Corporate Stock Author- ization December 31, 1913.....	\$866,470.67	
Amount of Corporate Stock Funds Authorized 1914	\$92,157.07	
Amount of Corporate Stock Funds Cancelled 1914	152,206.30	
Net amount to be deducted from unencum- bered balance of December 31, 1913.....	60,049.23	
Total amount available for use during 1914		\$806,421.44
Expenditures against Corporate Stock Funds year of 1914.....	\$2,139,272.66	
Amount of charges transferred from Special and Trust Funds to CFM25, January 31, 1914	6,370,100.63	
Total charge against Corporate Stock Funds year 1914.....		8,509,373.29
Amount of authorization required to cover charges remaining against account.....		\$7,702,951.85

SPECIAL AND TRUST FUND ACCOUNTS.

Balance of charges against Special and Trust Funds December 31, 1913.....	\$6,355,326.46	
Amount of charges transferred to Corporate Stock Fund CFM25 January 31, 1914.....	6,370,100.63	
Balance as unexpended	\$14,774.17	
Amount Special and Trust Fund received dur- ing 1914	27,135.21	
Total Special and Trust Funds available 1914		\$41,909.38
Amount of Special and Trust Funds expended 1914		27,824.64
Unexpended balance December 31, 1914.....		\$14,084.74

TRIAL BALANCE OF GENERAL LEDGER DECEMBER 31, 1914.

	Dr.	Cr.
Budget Allowance	\$140,777 11	
Appropriations, 1908		\$138 80
Appropriations, 1911		5 50
Appropriations, 1912		164 11
Appropriations, 1913		10,863 52
Appropriations, 1914		129,605 18
Special Revenue Bonds Authorized.....	21,582 12	
Reserve for Special Revenue Bonds Authorized.....		21,582 12
Special Revenue Bond Fund.....	21,582 12	
Special Revenue Bond Fund Reserve.....		21,582 12
Corporate Stock Authorized.....		7,702,951 85
Reserve for Corporate Stock Authorized.....	7,702,951 85	
Corporate Stock Funds.....		7,702,951 85
Corporate Stock Funds, Reserve.....	7,702,951 85	
Special and Trust Funds.....	14,084 74	
Special and Trust Funds, Reserve.....		14,084 74
Open Market Orders.....	26,118 83	
Open Market Order Reserve Appropriations.....		19,398 52
Open Market Order Reserve Special Revenue Bond Funds		54 00
Open Market Order Reserve Corporate Stock Funds....		3,962 50
Open Market Order Reserve Special and Trust Funds...		2,703 81
Contracts	1,342,353 55	
Contract Reserve Appropriation		36,377 63
Contract Reserve Special Revenue Bond Funds.....		20,218 45
Contract Reserve Corporate Stock Funds.....		1,285,757 47
Contract Orders	20,897 90	
Contract Orders Uncleared.....		20,897 90
Expense, 1911	119 14	
Expense, 1912	176,814 23	
Expense, 1913	687,586 77	
Expense, 1914	1,928,988 24	
Construction	1,632,473 27	
Recoverable Expense	6,313,505 86	
Office Furniture and Equipment.....	47,448 23	
General Plant Equipment.....	1,122,748 54	
Stores	91,021 91	
Invoices Payable		347,542 20
Department of Finance.....		10,561,807 41
Department of Finance (Invt. G. P. E.).....		1,104,986 67
Restoring and Repaving Deposits.....		19,316 91
Excess Accounts Receivable.....	3,673 07	
Miscellaneous Accounts Receivable.....		402 22
Vault Permits		12,276 33
Security Deposit Funds.....		27,368 00
Sewer Permits		21,207 33
Construction of Private Sewers.....		5,131 82
Appropriations, 1913-1914 (Cash Recd.).....		252 66
Sundries		191 00
Reserve for Restoring and Repaving Streets, Accounts Receivable		3,310 37
Finance Department (Cash Permits).....	127,774 42	
Surplus Restoring and Repaving.....		3,230 60
Refunds Due Plumbers.....		9,154 29
Roof and Shed Permits.....		30 00
Permits for Roof and Ground Signs.....		229 00
General Fund		512 50
Privileges		2,672 87
Ornamental Projection Permits.....		166 04
Cash Received, Street Improvement Fund, C.F.M. 25.....		12,365 46
	\$29,092,506 75	\$29,092,506 75

Comparative statements showing annual appropriations and liabilities incurred during the past four years:

	1911.	1912.	1913.	1914.
Appropriations	\$1,332,019.82	\$1,748,983.71	\$1,837,417.41	\$2,006,708.43

Liabilities incurred from Appropriation Accounts and all other Funds during the quarters as shown in the following comparative table:

	1911.	1912.	1913.	1914.
1st Quarter	\$124,624.42	\$120,473.25	\$108,768.89	\$1,302,487.45
2d Quarter	402,721.98	1,713,169.74	1,374,963.49	1,199,425.04
3d Quarter	716,040.42	1,107,117.16	355,463.62	1,229,136.27
4th Quarter	183,279.59	553,605.44	1,377,303.84	1,004,919.16
Total Liability	\$1,426,667.41	\$3,494,365.59	\$3,216,504.84	\$4,735,967.92

Balances in appropriation 1913 and previous years as of January 1, 1914	\$120,472.29
Appropriations for the year 1914	2,066,708.43
Supplementary appropriations as of January 1, 1914	1,204,371.22
Grand total	\$3,391,551.94

EXPENDITURES ON OPEN MARKET ORDERS AND CONTRACTS.

1914.	O. M. O.	Contracts.	Totals.
January	\$13,808.36	\$162,436.77	\$176,245.13
February	9,591.40	105,527.02	115,118.42
March	6,673.09	63,997.60	70,670.69
April	16,915.12	107,618.84	124,533.96
May	16,225.95	157,832.26	174,058.21
June	17,831.69	300,080.94	317,912.63
July	22,321.49	274,330.01	296,651.50
August	19,664.38	285,088.43	304,752.81
September	16,351.63	163,600.48	179,952.11
October	12,025.11	229,123.82	241,148.93
November	10,870.79	198,869.42	209,740.21
December	18,216.97	210,321.53	228,538.50
Totals	\$180,495.98	\$2,258,827.12	\$2,439,323.10

Contracts awarded prior to 1914 and not completed January 1, 1914. . .	\$2,176,837.81
Contracts awarded 1st quarter 1914	\$678,020.48
Contracts awarded 2nd quarter 1914	565,532.04
Contracts awarded 3rd quarter 1914	167,134.39
Contracts awarded 4th quarter 1914	172,051.30
	1,582,738.21
	\$3,759,576.02
Contracts completed during 1st quarter	\$489,458.20
Contracts completed during 2nd quarter	68,189.14
Contracts completed during 3rd quarter	217,366.33
Contracts completed during 4th quarter	829,030.03
	1,604,043.70
Contracts not completed on Dec. 31, 1914—Totals	\$2,155,532.32

STATEMENT SHOWING COST OF OPERATION AND MAINTENANCE OF THE VARIOUS BUREAUS IN THE BOROUGH OF QUEENS.

Functional Budget Classification.	General Administration.	Bureau of Highways.	Bureau of Sewers.	Bureau of Street Cleaning.	Bureau of Public Buildings and Offices.	Bureau—Topographical.	Supervision of Building Construction and Alteration.	Summary.	
								Sub-Totals.	Totals.
Personal Service	\$81,994.77	\$434,602.36	\$163,275.44	\$273,844.74	\$71,463.42	\$194,816.08	\$75,509.29	.....	\$1,295,506.10
Supplies .....	.....	.....	.....	.....	.....	.....	.....	.....	35,369.54
Botanical Supplies .....	.....	.....	.....	.....	.....	.....	.....	.....	\$102.00
Office Supplies	960.47	341.94	112.32	97.55	102.00	.....	.....	.....	2,079.26
General Plant Supplies	85.06	1,690.06	1,689.04	53.33	1,152.03	206.50	254.54	.....	4,052.58
Fuel Supplies .....	.....	3,381.54	5,014.22	1,423.77	6,445.93	1,525.45	.....	.....	6,194.97
Laundry Cleaning and Disinfecting Supplies .....	.....	20.53	5,065.68	5.40	616.91	.....	.....	.....	16,265.46
Motor Vehicle Supplies	890.02	503.42	287.43	157.54	.....	.....	205.74	.....	5,708.52
Food Supplies	31.50	.....	.....	.....	619.50	.....	.....	.....	2,395.01
Materials .....	.....	.....	.....	.....	.....	.....	.....	.....	651.00
Building Material .....	.....	1,331.35	407.19	192.45	1,539.46	.....	.....	.....	3,470.45
General Plant Material .....	.....	1,785.12	1,336.55	1,295.07	899.73	18.72	.....	.....	5,335.19
Highway Material .....	.....	226,506.99	76.38	.....	.....	.....	.....	.....	226,583.37
Sewer Material .....	.....	.....	2,252.65	.....	.....	.....	.....	.....	2,252.65
Equipment Issued as Consumable Stores .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
General Plant Equipment	44.00	11,558.67	3,554.72	5,368.60	1,469.63	5,093.50	427.70	.....	27,516.82
Motorless Vehicle and Equipment .....	.....	9,461.75	743.20	3,431.11	.....	.....	.....	.....	13,636.06
Motor Vehicle and Equipment	4,185.40	1,214.85	263.01	137.51	.....	539.57	713.03	.....	7,053.37
Office Equipment	2,620.65	1,784.35	1,322.51	130.99	935.76	769.15	.....	.....	7,563.41
Wearing Apparel	3.00	94.38	679.02	124.33	.....	57.36	.....	.....	958.09
Contract or Open Market Order Service .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
General Repairs	74.31	29,253.75	10,203.82	1,477.55	3,722.18	658.19	18.70	.....	45,408.50
Motor Vehicle Repairs	700.11	1,231.98	306.27	330.84	.....	537.84	294.57	.....	3,401.61
Transportation—Hire of Horses and Vehicles with Drivers .....	.....	117,287.95	22,634.57	258,307.60	.....	1,164.00	.....	.....	399,394.12
Transportation—Hire of Horses and Vehicles without Drivers .....	.....	5,625.68	2,854.20	.....	200.00	.....	.....	.....	8,679.88
Transportation—Carfare	344.10	6,061.36	2,122.85	571.59	404.23	2,910.05	2,084.30	.....	14,498.48
Transportation—Expressage and Delivery	2.54	18.00	27.32	19.97	.....	2.35	.....	.....	70.18
Transportation—Storage of Motor Vehicles	754.87	533.99	215.00	240.00	.....	305.30	440.00	.....	2,489.16
Transportation—Shoeing and Boarding of Horses .....	.....	.....	.....	1,938.29	.....	.....	.....	.....	1,938.29
Communication—Telephone Service .....	.....	3.85	20.15	7.95	2,284.69	25.55	.....	.....	2,342.19
General Plant Service	201.90	1,112.01	48.87	7,092.50	920.76	205.00	383.18	.....	9,964.22
Contingencies	145.75	5.00	3.00	14.71	37.00	10.00	.....	.....	215.46
Total Expenses	\$93,038.45	\$885,410.88	\$224,515.41	\$556,263.39	\$94,892.49	\$209,195.47	\$80,331.05	.....	\$2,113,647.14

**BUREAU FOR THE SUPERVISION OF
BUILDING CONSTRUCTION AND
ALTERATION**

ANNUAL REPORT OF THE BUREAU FOR THE SUPERVISION OF BUILDING CONSTRUCTION AND ALTERATION, DECEMBER 31, 1914.

The Bureau of Buildings is under direction of the Superintendent of Buildings, who, in accordance with the provisions of law, is appointed by the President of the Borough.

The Bureau is sub-divided into two branches: Administration and Inspection.

The Administrative force is made up as follows: Superintendent, Assistant Superintendent, Secretary, Chief Clerk, six Clerks, two Stenographers and Typewriters, four Plan Examiners, etc.

The Inspection force consists of Chief Inspector, twenty-two Inspectors of Carpentry and Masonry, eleven Plumbing Inspectors, one Steel and Iron Inspector, two Plastering Inspectors and one Elevator Inspector.

The duties of the Bureau consist of the enforcement of all Rules and Regulations, and the provisions of the Charter and such ordinances as may be established by the Board of Aldermen, and of the laws relating to the construction and alteration and removal of buildings or other structures erected or to be erected within the Borough.

The following statements will show how this was accomplished during 1914:

BUREAU OF BUILDINGS.

RECORD OF INSPECTIONS.		
Kind.		Number.
Construction		139,405
Iron and Steel.....		2,759
Elevator		2,682
Plumbing		49,659
Total		194,505

WORK COMPLETED.		
New Buildings		2,397
Alterations		1,295

PLANS AND APPLICATIONS FOR NEW BUILDINGS FILED AND ACTED UPON DURING THE
YEAR ENDING DECEMBER 31, 1914.

No. of Buildings.	Classification.	Estimated Cost.
2,309	Frame Dwellings	\$5,823,984
505	Brick Dwellings	2,123,550
86	Frame Stores and Dwellings.....	204,075
234	Brick Stores and Dwellings.....	1,180,850
11	Frame Tenements	48,400
293	Brick Tenements	3,649,800
....	Frame Stores and Tenements.....	.....
30	Brick Stores and Tenements.....	361,500
40	Public Buildings (Amusements).....	375,200
....	Public Buildings (Municipal).....	.....
53	Manufactories and Workshops.....	2,056,200
12	Churches	139,800
8	Schools	925,000
2	Hotels and Boarding Houses.....	41,000
1	Hospital	1,000
18	Storage, Warehouses, Etc.....	488,400
5	Office Buildings	60,000
347	Garages	241,136
70	Stables	139,100
563	Other Frame Structures.....	239,295
4,596	Totals	\$18,098,290

PLANS AND APPLICATIONS FOR ALTERATIONS FILED AND ACTED UPON DURING THE YEAR
ENDING DECEMBER 31, 1914.

No. of Buildings.	Classification.	Estimated Cost
1,580	Frame Dwellings	\$415,367
133	Brick Dwellings	30,820
279	Frame Stores and Dwellings.....	132,811
128	Brick Stores and Dwellings.....	53,548
28	Frame Tenements	5,315
34	Brick Tenements	18,290
26	Frame Stores and Tenements.....	5,800
39	Brick Stores and Tenements.....	13,255
46	Public Buildings (Amusements).....	51,300
7	Public Buildings (Municipal).....	9,425
150	Manufactories and Workshops.....	241,375
23	Churches	18,125
36	Schools	48,725
40	Hotels, Boarding Houses, Etc.....	47,725
4	Hospitals	2,000
35	Storage, Warehouses, Etc.....	29,155
23	Office Buildings	35,486
40	Garages	25,780
39	Stables	27,990
209	Other Frame Structures.....	62,889
2,909	Totals	\$1,275,181

PLANS AND APPLICATIONS FOR NEW BUILDINGS FILED AND ACTED UPON DURING THE YEAR ENDING DECEMBER 31.

Classification	1911			1912			1913			1914		
	No.	Est. Cost.	No.	Est. Cost.	No.	Est. Cost.	No.	Est. Cost.	No.	Est. Cost.	No.	Est. Cost.
Frame Dwellings	2,658	\$7,657,641	2,691	\$7,890,089	2,530	\$6,540,471	2,309	\$5,823,984				
Brick Dwellings	1,105	4,083,305	674	2,860,850	536	2,455,410	505	2,123,530				
Frame Stores and Dwellings.....	70	194,900	65	179,825	76	198,460	86	204,075				
Brick Stores and Dwellings.....	226	1,003,850	176	869,900	131	654,680	234	1,180,850				
Frame Tenements	30	135,500	1	4,000	7	35,500	11	48,400				
Brick Tenements	329	3,001,700	203	1,954,800	247	2,999,500	293	3,649,800				
Frame Stores and Tenements.....	...	.....	1	4,500	.....	.....	.....	.....
Brick Stores and Tenements.....	121	1,146,500	17	167,500	95	899,000	30	361,500				
Public Buildings (Amusements).....	45	238,200	52	523,100	53	335,475	40	375,200				
Public Buildings (Municipal).....	2	90,000	13	652,000	4	98,500	.....	.....		
Manufactories and Workshops	65	1,223,200	83	2,922,150	56	1,107,150	53	2,056,200				
Churches	7	45,900	6	98,500	10	51,900	12	139,800				
Schools	7	467,000	6	437,000	11	721,579	8	925,000				
Hotels, Boarding Houses, Etc.....	20	404,000	20	274,100	16	156,200	2	41,000				
Hospitals	4	1,250,000	1	87,000	3	347,600	1	1,000				
Storage Warehouses	37	714,485	23	97,050	20	282,625	18	488,400				
Office Buildings	19	185,140	22	240,875	16	98,300	5	60,000				
Garages	147	148,451	214	143,798	241	249,673	347	241,136				
Stables	122	79,980	97	104,365	80	131,680	79	139,100				
Other Frame Structures.....	360	143,503	456	139,820	514	151,562	563	239,295				
Totals	5,374	\$22,212,255	4,821	\$19,651,222	4,646	\$17,521,235	4,596	\$18,098,290				

PLANS AND APPLICATIONS FOR ALTERATIONS FILED AND ACTED UPON DURING THE YEAR ENDING DECEMBER 31.

Classification	1911			1912			1913			1914		
	No.	Est. Cost.	No.	Est. Cost.	No.	Est. Cost.	No.	Est. Cost.	No.	Est. Cost.	No.	Est. Cost.
Frame Dwellings	587	\$305,438	741	\$329,234	1,302	\$366,152	1,580	\$415,367				
Brick Dwellings	47	31,665	21	8,400	36	10,179	133	30,820				
Frame Stores and Dwellings	206	103,925	214	106,129	313	112,799	279	132,811				
Brick Stores and Dwellings	43	9,265	49	14,362	66	15,925	128	53,548				
Frame Tenements	34	22,635	17	4,995	22	5,179	28	5,315				
Brick Tenements	8	1,545	9	4,100	14	14,945	34	18,290				
Frame Stores and Tenements	20	6,410	10	3,055	17	3,390	26	5,800				
Brick Stores and Tenements	13	10,065	17	12,176	27	12,664	39	13,255				
Public Buildings (Amusements)	39	24,536	30	17,945	43	48,642	46	51,300				
Public Buildings (Municipal) .....	.....	.....	4	10,350	3	2,118	7	9,425				
Manufactories and Workshops	89	178,075	96	185,335	155	261,312	150	241,375				
Churches	13	21,000	9	31,425	15	24,033	23	18,125				
Schools	10	49,575	14	226,500	20	56,350	36	48,725				
Hotels, Boarding Houses, Etc.	41	40,624	37	70,327	67	75,555	40	47,725				
Hospitals	1	300	2	700	4	724	4	2,000				
Storage, Warehouses	8	9,600	18	114,385	43	135,151	35	29,155				
Office Buildings	26	32,515	17	5,250	20	29,540	23	35,486				
Garages	5	3,125	15	6,085	31	4,352	40	25,780				
Stables	18	8,250	29	11,800	41	13,103	39	27,990				
Other Frame Structures	65	13,905	124	24,690	259	41,973	219	62,889				
Totals	1,273	\$872,453	1,473	\$1,187,243	2,498	\$1,234,086	2,909	\$1,275,181				

VIOLATIONS OF THE LAW DURING THE YEAR ENDING DECEMBER 31.

Nature of Violation.	Pending Dec. 31	Received Since	Total for Disposition	Removed	Pending Dec. 31	Re- ferred to Corp. Counsel
Defective construction, plumbing, etc.	563	513	1,076	259	817	21
Erecting, altering or removing without a permit.	539	503	1,042	574	468	29
Unsafe buildings	209	185	394	95	299	.....
Totals	1,311	1,201	2,512	928	1,584	50

TOPOGRAPHICAL BUREAU
AND
BUREAU OF SUB-STRUCTURES AND
FRANCHISES

REPORT OF THE TOPOGRAPHICAL BUREAU OF THE BOROUGH OF QUEENS, CITY OF NEW YORK, 1914.

TENTATIVE MAPS.

The year 1914 saw the completion by this Bureau, and the adoption by the Board of Estimate and Apportionment, of the Black Stump Tentative Map. This map lays down a tentative street and grade system for an area of 5,460 acres, lying approximately between the old Stewart Railroad and North Hempstead Turnpike on the north, Metropolitan and Hillside Avenues on the south, Flushing Creek and Forest Park on the west and Bushville Road on the east.

The tentative map of the Borough is now complete, except for the low land adjacent to Jamaica Bay and south of the Brooklyn water supply conduit. A tentative map for this area, to be known as the Idlewild Tentative Map, will be completed and submitted to the Board of Estimate and Apportionment, for its approval, during 1915.

FINAL MAPS.

During the year 1914 the Board of Estimate and Apportionment approved eight of our final section maps (totaling 2,386 acres). Within the same period we forwarded to the Board of Estimate and Apportionment, for its approval, eleven of these final sections, and there is now before it, waiting adoption, six. In addition to these final section maps, the Board of Estimate and Apportionment approved six special final maps and forty-eight maps altering final maps previously approved by it. Eight of these special maps and 67 of the alteration maps were forwarded by this Bureau to the Board of Estimate and Apportionment, for its approval, during the year; and there are nine of the former and fifty-eight of the latter now before it waiting approval.

In course of preparation, there are now eleven final section maps with the draughtsmen, eight with the computers, and twelve with the surveyors.

STREET OPENING MAPS.

This Bureau has been aware of the importance of quickly and cheaply preparing the maps required by the Commissioners in street opening proceedings. The cost of these maps is a direct charge upon the property directly benefited, and often the immediate need of some important improvement requires prompt action on our part.

To meet changes made in the lines of Queens boulevard, subsequent to the completion by this Bureau of the draft damage map, an amended draft damage map had to be made with all haste, so as not to delay the hearings of the Commissioners.

This amended draft damage map was forwarded to you on May 27, 1914, and approved by the Board of Estimate and Apportionment on June 26, 1914. The benefit maps in the proceedings are now well advanced, and will be forwarded to you early in 1915. These maps will number 116, and affect an area of 1,590 acres.

To expedite the legal requirement that fee title to a street must be in the City, before a transit line can be constructed therein, we lost no time in making the maps in the proceedings to open Liberty Avenue, Campion Street and Sutphin Road. Through the first, the Brooklyn Rapid Transit is extending its elevated line from the Brooklyn Borough Line to Lefferts Avenue, and through the second and third, the Manhattan and Queens Traction Company is to reconstruct and extend its trolley line.

In the Liberty Avenue proceeding, the completed draft damage and profile maps, and an amended rule map were forwarded from this office in May, and shortly thereafter approved by the Board of Estimate and Apportionment. The Commissioners in this proceeding have, therefore, all the data necessary from this office, to enable them to hold their hearings

In the case of Campion Street and Sutphin Road, the Board of Estimate and Apportionment passed upon July 30, 1914, a resolution to acquire title, and to pave the way for an early vesting of title, instructed the Corporation Counsel to apply for the appointment of Commissioners immediately upon receipt of the rule maps properly certified. It, therefore, devolved upon this Bureau to at once make the rule maps. On August 13th, we forwarded these maps, and upon August 27th, they were approved by the Board of Estimate and Apportionment, which, at the same time, passed a resolution vesting title to all of Campion Street, and to about one-third of Sutphin Road, effective upon the filing of oaths of Commissioners.*

The proceeding to acquire title to East River Park is worthy of note. All of the maps in this proceeding, except the final damage and benefit, were forwarded from this office in 1913. The final damage and benefit maps were forwarded upon October 22nd this year. In this proceeding (also in others) the Corporation Counsel called upon this Bureau for witnesses to give expert testimony.

With a view of lessening the cost of the final damage maps and the benefit maps, we are to have them printed—the final damage maps from the draft damage map, and the benefit maps from a draft benefit map. We have been studying a means of doing this for some time, and believe that the plan we now have will prove feasible, and result in considerable economy. These final maps are of a uniform size of 18 in. x 11 in., and are bound in a book with the findings of the street opening commissioners. Heretofore, they have been made by draughtsmen. In next year's report, it will probably be possible to give you a comparison between the cost of the two methods. We have arranged also to utilize the Sewer Bureau's benefit maps, in the cases where their needs for these maps have antedated ours. This should further lessen the cost of street opening maps, besides preventing duplication by this Bureau of work already done by the Sewer Bureau.

GRADES.

In the 1913 report of this Bureau, the need for grade charts was mentioned. This year we started their preparation. The scheme of their preparation was determined upon at a conference with the Deputy Chief Engineer of the Board of Estimate and Apportionment. They are to be of the same size and bear the same number as our final section maps. They will give in detail the grades on curb and house-line, and at all street intersections; also intermediate grades within the block, where necessary. They will be adopted by the Board of Estimate and Apportionment and filed in the offices of record similar to the final sections, and thereafter there can be no differences of side line grades, caused by different methods of interpretation used by private surveyors in reducing from the center line grade.

FIELD WORK.

During 1914, the surveying parties completed surveys for twelve final section maps, and the surveys for twelve others are now under way. Of the completed sections, three were in the Third Ward, four in the Fourth Ward, and five in the Fifth Ward; of those now under survey four are in the Third Ward, six in the Fourth Ward, and two in the Fifth Ward. In addition to the surveys for final sections, numerous others were made for special final maps, and for alteration maps.

DEDICATIONS.

The number of opinions of dedications rendered by the Corporation Counsel for streets in this Borough during 1914 was 124, totaling 221,140 linear feet. In last year's report, the average cost of a street opening proceeding was given as about \$2 per foot of center line. An analysis of more recent proceedings shows this figure to be

*Oaths filed December 30, 1914.

increasing. Thus is the importance of applying the principle of dedication to every street possible further evidenced.

Attention was called in last year's report to the fact that the Corporation Counsel was restricting the dedication of streets for which there was no final map to subsurface improvements. Following representations made to him by this Bureau of the illogicalness of such dedications, he now renders opinions that allow for full street improvements, conditional only on the later inclusion of the street in the final map.

OLD RECORDS.

The efforts of this Bureau to have the old records, now in the custody of the Comptroller, of the several civil subdivisions of Queens extant prior to consolidation, copied and indexed, have at last borne fruit. While our requests for an issue of special revenue bonds to be expended under our direction for copying these records were denied, the Comptroller's office, appreciating their importance, undertook to copy them at the expense of that office. When the work is completed, we are to have copies, and will then be in a position to make a systematic study of the titles to old streets, and to quote incontrovertible evidence of dedication in many doubtful cases.

CESSIONS.

This Bureau is ever ready and willing to assist property owners in ceding the street-bed in front of their property to the City, thereby escaping assessment (except where buildings are taken) for its legal opening. Property owners are not alive to the importance of ceding their streets to the City. They seem obsessed with the idea that the City will pay for it. Whereas, as a matter of fact, they receive nothing, unless buildings or virgin land is taken, and then, it is not the City, but their neighbors that pay. As mentioned under dedications, the cost of street opening proceedings is increasing, so it behooves property owners to take a more active interest in this matter.

BULKHEAD LINES.

The computations for the new bulkhead lines of Newtown Creek, following the tangential plan now used by the New York Harbor Line Board, were completed, and for its tributaries, Maspeth Creek and Dutch Kills Basin, the bulkhead lines were established. A map showing these new bulkhead lines will shortly be transmitted to the authorities for final action.

QUEENSBORO BRIDGE.

In accordance with your instructions, this Bureau made a study of Queensboro Bridge, to determine a means whereby the subway trains of the New York Municipal Railway Corporation (B. R. T.) could be accommodated thereon, without a reduction in the width of the vehicular roadway. The result of our study was submitted to you in a report (accompanied by sketches) dated June 12, 1914. In this report a scheme was set forth for accomplishing the purpose sought, which was considered practicable, and was favorably considered by the Bridge Department, the Public Service Commission and the Municipal Railway Corporation. In brief, the plan we proposed was to use the inner trolley tracks, now used solely by the New York and Queens County Railway Company, by the Third Avenue Railway Company and the Manhattan and Queens Traction Company also, and to run the subway trains on the outer tracks, now used by the two last-mentioned companies. The structural changes to the bridge necessary to enable these outer tracks to carry the larger and heavier subway cars and trains were sufficiently investigated to prove that they would be neither costly nor difficult. The final disposition of our scheme is, as you know, still in abeyance, pending the determination of the economy of extending the subway as a tunnel under the river, thereby saving

the cost of raising the trains from the low level of the subway to that of the bridge, and doing, once for all, what many claim the influx of traffic into Queens will necessitate at an early date.

THE PUBLIC.

To better serve the interests of the public, and to promote the welfare of the Borough of Queens, we are always ready and willing to consider and to apply, where practicable, suggestions and criticisms by the public. And for the use of the public, all the maps and information in the possession of this office are at their disposal. Lithograph copies of all the more important maps can be purchased at the nominal price fixed by the Board of Estimate and Apportionment; blue prints of the maps which have not been lithographed can be had for the cost of printing, or sketches can be made by anyone. All the information concerning street titles and the procedure for ceding and dedicating them to the City can also be had at this Bureau.

OFFICE ORGANIZATION.

The employees of the Topographical Bureau on December 31, 1914, numbered 109 technical men, 40 per diem men and a clerical force of 5—total 154. The total cost for maintenance for the year 1914 was \$229,944.75—\$197,845.19, chargeable to the "Budget" or to "Corporate Stock," and \$32,099.56 chargeable to Street and Park Opening Fund.

A few words regarding the organization of the Topographical Bureau may facilitate a better understanding of the details contained in the following pages of the report. The work of this office falls naturally into two divisions: (1) A division charged with the preparation of the official map of the Borough of Queens, referred to in this report as the "Borough Map Division"; and (2) a division charged with the preparation of the maps necessary in street opening proceedings, referred to in the report as the "Street Opening Division."

The "Borough Map Division" is further subdivided into three corps:

Monumenting Corps: Charged with all the surveys and field work incidental to the preparation of the final map and the monumenting of the Borough.

Computing Corps: Charged with all the computations incidental to the preparation of the final map of the Borough.

Draughting Corps: Charged with all the draughting required to prepare the final map of the Borough.

The "Street Opening Division" is subdivided into two corps:

Surveying Corps: Charged with all the field work incidental to the preparation of the maps necessary in street opening proceedings.

Office Corps: Charged with all the computations and draughting required to prepare the maps necessary in street opening proceedings.

In addition to the several corps mentioned above, we have a small corps engaged in gathering data, and in making reports relative to the legal status of the streets of the Borough.

The details tabulated in the following pages are arranged, beginning on page 6, according to the work performed by these several corps, and in the order in which they are mentioned above. A complete index will be found on pages 44-45 of this report.

In conclusion I wish to state that the conduct of this Bureau is predicated upon the fact that the full efficiency and ideals of your administration can only be realized by actively and heartily co-operating with the citizens, taxpayers and business men of the Borough of Queens.

TENTATIVE MAPS APPROVED BY THE BOARD OF ESTIMATE AND APPORTIONMENT.

Black Stump—Bounded approximately by Flushing River, Fowler Street, Peck Avenue, 153d Street (Rose Street), Oak Avenue, 164th Street (Renwick Avenue),

Fresh Meadow Road, North Hempstead Turnpike, Rosedale Boulevard, Grand Central Parkway, Midland Parkway, Hillside Avenue, Kew Gardens Road, Riverside Avenue and 69th Avenue. (T. B. No. 449.)

Flushing River—Bounded approximately by Riverside Avenue, Unity Street, 120th Street, Lurting Street, Flushing River, Jackson Avenue, Lawrence Street, Amity Street, Delong Street, Sanford Avenue, Flushing River and Rodman Street. (T. B. No. 489.)

FINAL SECTIONS (ATLAS SHEETS) APPROVED BY THE BOARD OF ESTIMATE AND APPORTIONMENT.

†No. 31—Bounded approximately by the Brooklyn Borough Line, the Evergreen Branch of the Long Island Railroad and the Manhattan Beach Division of the Long Island Railroad.

†No. 44—Bounded approximately by Woodhaven Avenue, Cornell Street, Orville Street, Fleet Street, Thornton Street, Rocton Street, the Main Line Division of the Long Island Railroad, Greenway Terraces, Middlemay Place, Bow Street, Slocum Crescent, Continental Avenue, Metropolitan Avenue, Orr Place, Olcott Street, Selfridge Street and Nansen Street.

No. 115—Bounded approximately by North Conduit Avenue, Boyd Avenue, Stanley Avenue, Oswego Street, Wortman Avenue, Magra Street, Cozine Avenue, Kennebec Street, Fairfield Avenue, Iroquois Street, Vandalia Avenue, Sapphire Street, Fairfield Avenue and the Brooklyn Borough Line.

No. 123—Bounded approximately by Freedom Avenue, Liberty Avenue, Portland Avenue, Kimball Avenue, Napier Avenue, Jerome Avenue, Hamilton Avenue, Kimball Avenue, Lefferts Avenue, Roanoke Avenue, Ohio Street, Suwanee Avenue, Birch Street, Tuckahoe Avenue, Walnut Street, Ulster Avenue, Cedar Avenue, Sutter Avenue, Peconic Avenue and Rockaway Boulevard.

No. 125—Bounded approximately by Iroquois Street, Fairfield Avenue, Merrimac Avenue, Wortman Avenue, Boyd Avenue, South Conduit Avenue, Galveston Avenue, Cozina Avenue, Channel Street, Vandalia Avenue, Cohancy Avenue, Dunham Avenue, Killarney Avenue, Flynn Avenue, Woodhaven Avenue, Grimm Avenue, Potomac Street, Egan Avenue, Merrimac Avenue and Dunham Avenue.

No. 126—Bounded approximately by Missouri Street, Rockaway Boulevard, Hamilton Avenue, Ulster Avenue, Church Street, Tuckahoe Avenue, Neosho Street, Suwanee Avenue, Quebec Street, Tuckahoe Avenue, Shoshone Street, Ulster Avenue, Maure Avenue, Vistula Avenue, Atfield Avenue, Yukon Avenue, Warren Street, Sutter Avenue, Shoshone Street, Dumont Avenue, Panama Street and Blake Avenue.

No. 127—Bounded approximately by Passaic Street, Roanoke Avenue, Miriam Avenue, Liberty Avenue, Baker Avenue, Blanco Place, Van Wyck Avenue, Warburton Avenue, Atfield Avenue, Vistula Avenue, Warren Street, Ulster Avenue, Shoshone Street, Tuckahoe Avenue, Quebec Street and Suwanee Avenue.

No. 175—Bounded approximately by Peconic Avenue, Greenwood Avenue, Dumont Avenue, Cedar Avenue, Blake Avenue, Lefferts Avenue, Dumont Avenue, Raritan Street, North Conduit Avenue, Panama Street and Fairfield Avenue.

FINAL MAPS APPROVED BY THE BOARD OF ESTIMATE AND APPORTIONMENT.

Map establishing the lines and grades of *Yale Avenue*, from Hillside Avenue to Jamaica Avenue. (T. B. No. 370.)

Map establishing the lines and grades of *Wainscott Avenue*, from Beechhurst Avenue to Bell Avenue. (T. B. No. 415.)

Map showing the street system for the territory bounded by Jamaica Avenue, Ezra Street, Archer Street and Van Wyck Avenue. (T. B. No. 418.)

† Readoption, necessitated by modifications of previously adopted street system.

Map establishing a street system for the *Auburndale Section*. (T. B. No. 437.)
Map establishing the lines and grades of *Queens Boulevard*, through Maple Grove Cemetery. (T. B. No. 451.)

Map establishing the lines and grades of *Sutphin Road*, from Jamaica Avenue to Hillside Avenue. (T. B. No. 456.)

ALTERATION MAPS APPROVED BY THE BOARD OF ESTIMATE AND APPORTIONMENT.

Map showing a change in the territory bounded by Baxter Avenue, Roosevelt Avenue, 37th Street, Hunt Street, Junction Avenue, Lurting Avenue, Card Place, South Railroad Avenue, Barnwell Street, Queens Boulevard, South Railroad Avenue, Lauronson Place, Queens Boulevard, Fitch Avenue, Leon Place and Broadway. (T. B. No. 302.)

Map altering the grades of *Greenpoint Avenue*, from Starr Avenue to Newtown Creek. (T. B. No. 340.)

Map altering the lines of *Queens Boulevard*, from Van Loon Place to Caldwell Avenue. (T. B. No. 350.)

Map establishing a *Public Place*, at Borden Avenue and Young Street. (T. B. No. 354.)

Map establishing the lines and grades of *Rostrom Avenue* and *Amityville Avenue*. (T. B. No. 359.)

Map altering the grades of *Ziegler Avenue*, from Jackson Avenue to State Street. (T. B. No. 363.)

Map altering the grades of *McKinley Avenue*, from Central Avenue to Myrtle Avenue. (T. B. No. 365.)

Map altering the lines of *Eighth Street*, from Hayes Avenue to Broadway. (T. B. No. 373.)

Map altering the lines of *Milton Street*, near Flushing Avenue. (T. B. No. 378.)

Map altering the lines of *Trowbridge Street*, from Van Alst Avenue to Willow Street. (T. B. No. 379.)

Map establishing the lines of *Ziegler Avenue*, across the Long Island Railroad. (T. B. No. 381.)

Map altering the lines of *Calamus Avenue*, from Delafield Street to Grand Street. (T. B. No. 389.)

Map altering the grade of *Union Street*, from Donnelly Avenue to the Long Island Railroad. (T. B. No. 398.)

Map altering the lines of *Puritan Avenue*, from Burns Avenue to Queens Boulevard. (T. B. No. 399.)

Map altering the lines of *Yellowstone Avenue*, from Groton Street to Queens Boulevard. (T. B. No. 400.)

Map altering the grades of *Carolyn Street*, from Foster Avenue to Barnett Avenue. (T. B. No. 402.)

Map altering the grades of *Myrtle Avenue*, from Ridgewood Place to Martha Place. (T. B. No. 403.)

Map altering the lines of *Clermont Avenue*, from Maspeth Avenue to Fresh Pond Road. (T. B. No. 406.)

Map establishing the lines and grades of *Interborough Parkway*, from Eastern Parkway to Forest Park. (T. B. No. 410.)

Map altering the lines of *Stanhope Street*, from Amory Avenue to Metropolitan Avenue. (T. B. No. 411.)

Map altering the lines and grades of *Maspeth Avenue*, from Maurice Avenue to Clermont Avenue. (T. B. No. 413.)

Map altering the lines of *Woodhaven Avenue*, from Jamaica Avenue to Atlantic Avenue. (T. B. No. 414.)

Map establishing a crown in *42nd Street*, between Sigel Avenue and Schurz Avenue. (T. B. No. 417.)

Map altering the grades of *Kingsland Avenue*, from 42nd Street to Luydig Street. (T. B. No. 420.)

Map altering the grades of *Seventh Avenue*, from Jamaica Avenue to Grand Avenue. (T. B. No. 421.)

Map showing a change in the street system bounded by North Villa Street, Ridgewood Avenue, Maure Avenue, Sycamore Place, Atfield Place, Long Island Railroad, Van Wyck Avenue, Garden Street, South Morris Avenue, Long Island Railroad, Wisner Place, North Wickes Street and Fulton Place. (T. B. No. 422.)

Map altering the grades of *Astoria Avenue*, from Eighth Avenue to Steinway Avenue. (T. B. No. 423.)

Map altering the gradess of *Lefferts Avenue*, from Tuckahoe Avenue to Vistula Avenue. (T. B. No. 431.)

Map altering the lines of *Queens Boulevard*, from Caldwell Avenue to Hillside Avenue. (T. B. No. 432.)

Map altering the lines and grades of *Franklin Street*, from Remsen Street to Willow Street. (T. B. No. 434.)

Map altering the lines of *Richard Avenue*, from Edsall Avenue to Central Avenue. (T. B. No. 435.)

Map reducing the width of *46th Street*, from Astoria Avenue to Roosevelt Avenue. (T. B. No. 438.)

Map altering the width of *Sutphin Road*, from Rocton Street to Rockaway Boulevard. (T. B. No. 439.)

†Map altering the lines of *Elderts Lane*, from Jamaica Avenue to Atlantic Avenue. (T. B. No. 441.)

Map altering the grades of *Cypress Avenue*, from Decatur Street to Armand Place. (T. B. No. 442.)

Map altering the lines of *Flushing River*, from Gilroy Avenue to Livingston Street. (T. B. No. 443.)

Map altering the lines of *Bodine Street*, from Vernon Avenue to Sherman Place. (T. B. No. 444.)

Map altering the lines of *Queens Boulevard*, from Booth Street to Continental Avenue. (T. B. No. 445.)

Map altering the grades of *Harvard Place*, from Canonbury Road to Jamaica Avenue. (T. B. No. 446.)

Map altering the lines of *Spangler Street* and *Smith Street*, from Lambertville Avenue to Ulster Avenue. (T. B. No. 447.)

Map fixing the curb lines on *Second Avenue* and *Flushing Avenue*, (T. B. No. 450.)

Map altering the grades of *Bathgate Avenue*, from Mitchell Avenue to Bayside Avenue. (T. B. No. 454.)

Map altering the grades of *Murray Street*, from Alice Street to Jackson Avenue. (T. B. No. 464.)

Map altering the lines of *Corona Avenue*, from Broadway to Maurice Avenue. (T. B. No. 472.)

Map altering the lines of *Corona Avenue*, from Alstyn Avenue to Hanover Avenue. (T. B. No. 473.)

Map altering the grades of *Decatur Street*, from Irving Avenue to Wyckoff Avenue. (T. B. No. 481.)

Map altering the lines of *Bayreuth Street*, from Murray Street to Dutchess Street. (T. B. No. 486.)

Map altering the lines of *Maywood Street*, from Maywood Street to Medford Street. (T. B. No. 491.)

†Prepared jointly by the Boroughs of Brooklyn and Queens.

BOROUGH MAP DIVISION.

MONUMENTING CORPS.

Monumenting Surveys—Completed.

New York Avenue—South Street to Rockaway Boulevard. No monuments set.

Bergen Avenue—Hillside Avenue to Highland Avenue. No monuments set.

Sutphin Road—Jamaica Avenue to Hillside Avenue. No monuments set.

Palatina Avenue—Palo Alto Avenue to Hillside Avenue. No monuments set.

Bergen Avenue—Jamaica Avenue to Hillside Avenue. No monuments set.

Hollis Park and Farmers Avenue—South to South Street. Monuments set.

Jamaica Map—Tie-lines on Hillside Avenue.

Jamaica Map—Tie-lines on Yukon Avenue and Ulster Avenue.

Jamaica Map—Tie-lines on Rockaway Boulevard and New York Avenue.

Tie-line, from *Jamaica* to *Queens*, via Long Island Railroad.

Hollis (Map No. 1). Monuments set.

Kew Gardens and vicinity. Monuments set in part.

Final Sections 127, 128, 129, 136 and 137, Jamaica; 54, 55 and 56 College Point, and 216, 217, 218, 226, 227, and a portion of 202, Rockaway.

Monumental Surveys—Not completed.

Grand Central Parkway—Monuments set (in part).

Final Sections 61, 68, 69 and 75, Flushing, and 219 and 230, Rockaway.

Surveys and Alterations and Additions—Completed.

Section bounded by Myrtle Avenue, Cooper Street, Proctor Street and Trotting Course Lane. No monuments changed.

Sutphin Road—Lincoln Avenue to Rockaway Boulevard. No monuments changed.

Centerville Avenue—Rockaway Boulevard to Long Island Railroad.

Rockwell Place, Etc.—Monuments reset.

Woodhaven Avenue—Jamaica Avenue to Old South Road. No monuments changed.

Pearlree Avenue—Union Avenue and Centerville Avenue. No monuments changed.

Prospect Place—Putnam Avenue to Cornelia Street.

Monuments drilled on Liberty Avenue, Kimball Avenue, Jerome Avenue, Broad Street, Laurel Hill Boulevard, Columbia Avenue, Hyatt Avenue, Firth Avenue, Caldwell Avenue, Plover Place, Grand Street, Eighth Street, Jackson Avenue, Cypress Avenue and Cooper Avenue.

Traffic Street and vicinity—Monuments reset.

Woodhaven Avenue—Jamaica Avenue to Atlantic Avenue. Monuments not reset.

Sackett Street—Monuments reset.

Queens Boulevard—Grand Street to Caldwell Avenue. Monuments not reset.

Sutphin Road—Lambertville Avenue to Rockaway Boulevard. Monuments set (in part).

Maspeth Avenue—Maurice Avenue to Marabel Avenue. Monuments not reset.

Clermont Avenue—Maspeth Avenue to Mt. Olivet Avenue. Monuments not reset.

Surveys for Alterations and Additions—Not completed.

Jamaica Avenue—Lefferts Avenue to Grand Street. Monuments not reset.

Final Traversing—Completed.

Final Sections 127, 128 and 129, Jamaica.

Jamaica Map tie-lines.

Kew Gardens and vicinity.

Final Traversing—Not completed.

Final Sections 136 and 137, Cedar Manor.

Grand Central Parkway—

Vay Wyck Avenue and Maure Avenue. Grade levels.

School Site, Lincoln Avenue and Rockaway Boulevard.

Bergen Avenue, corner Hillside Avenue.
 Howell Avenue—Woodside Avenue to Fifth Street.
 Harmon Street—Grandview Avenue to Forest Avenue.
 Grand Avenue—Ninth Avenue to Tenth Avenue.
Park Lane—Excavation test.
Jamaica survey tie-in.
New York Avenue—South Street to Oak Street. Elevation.
Ocean Avenue—Kimball Avenue to Rockaway Boulevard. Building location.
Sutphin Road—Hillside Avenue to Jamaica Avenue. Rule map test.
51st Street Sewer—Line and grade test.
Jamaica Avenue and *Park Street*—Levels for grade change.
Astoria street levels for grade revision.
South Aqueduct and *Venetia Park* tie-in.
Leveling—Completed.
Franklin Street—Main Street and Trowbridge Street, and Remsen Street to Van Alst Avenue.

DISTRICT SOUTH OF THOMSON AVENUE AND EAST OF MEADOW STREET.

Newtown Road—Jackson Avenue to Broadway, and Jackson Avenue to Burnside Avenue.

MISCELLANEOUS SURVEYS.

For Grade Charts—Hallett Street, Howland Street, Merchant Street, Crescent Street, Goodrich Street, Lawrence Street, Second Avenue, Fourth Avenue, Pleasure Avenue, Van Alst Avenue, Chauncey Street, Park Place, Shore Road, Wolcott Avenue, Ditmars Avenue, Bermel Place, McClellan Place, Potter Avenue, Davidson Place, Munson Place, Phillips Place, Woolsey Avenue, Seventh Avenue, Steinway Avenue, Eleventh Avenue, Twelfth Avenue, Theodore Street, Purdy Street, South Street, Wilson Avenue, Vandeventer Avenue and Newtown Road.

For Bench Details, Etc.—Rosedale Manor, South Rosedale, Walbridge, Three Mile Mill Road, Idlewild, Springfield Park, Jamaica South, South Ozone Park, Bergen Landing Road, Jamaica Park South, Bayview Landing, Springfield Dock, Kissam Lane, Jamaica Creeks, Nos. 1, 2, and 3; Annahurst, Jamaica Court, Jamaica Villa, Rockaway Terrace, Smithfield Park, Jamaica Park, Baisley Park, South Ozone Park, Ramblersville, Richmond Hill Park, Bergen Heights, Glen Morris, Boulevard Terrace, Dunton Lodge and Queens Manor.

Monument Tests Made—Newtown Road, Vandeventer Avenue, Grand Avenue, Franklin Street, Park Layout at Hoyt and Flushing Avenues; section bounded by Borden Avenue, Oliver Street, Meadow Street, Thomson Avenue and Van Dam Street; Freeman Avenue, Hamilton Street, Crescent, Flushing Avenue, Grand Avenue, Nott Avenue, Harris, Fourteenth Street, Ridge Street, Fifth Street, Burnside Avenue and Stryker Avenue.

For the new map of the City now being made by the Board of Estimate and Apportionment, traverses were run from Far Rockaway and Rosedale, via the Long Island Railroad, to Valley Stream, and from Great Neck via Broadway, Long Island Railroad, Plandome Road and South Road to Port Washington. The traverses were in each case verified by triangulation, and the necessary computations made.

COMPUTING CORPS.

Area of monument traverses adjusted.....	1,427 acres
Area of block dimensions computed.....	1,058 acres
Linear feet of monument traverses adjusted.....	419,700 feet
Linear feet involved in alterations.....	1,458,960 feet
Linear feet of street location computed.....	18,400 feet

Linear feet of general traverses adjusted.....	169,710 feet
Linear feet of bulkhead computed.....	47,200 feet

SPECIAL MAPS PREPARED.

New York Avenue.....	58,600 feet
Bergen Avenue	1,740 feet
Sutphin Road	4,310 feet
Palatina Avenue	1,660 feet
Eighth Avenue	15,140 feet
Grand Central Parkway—Layout.....	20,000 feet
Liberty Avenue (Catherine Street).....	730 feet

DRAUGHTING CORPS.

FINAL SECTIONS—COMPLETED AND FORWARDED TO THE BOARD OF ESTIMATE AND APPOINTMENT FOR APPROVAL.

No. 1—Bounded approximately by Calvary Cemetery, Laurel Hill Boulevard, Halle Avenue, Hull Avenue, Debevoise Avenue and Newtown Creek.

No. 31—Bounded approximately by the Brooklyn Borough Line, the Evergreen Branch of the Long Island Railroad and the Manhattan Beach Division of the Long Island Railroad.

No. 44—Bounded approximately by Woodhaven Avenue, Cornell Street, Orville Street, Fleet Street, Thornton Street, Roxton Street, the Main Line Division of the Long Island Railroad, Greenway Terraces, Middlemay Place, Bow Street, Slocum Crescent, Continental Avenue, Metropolitan Avenue, Orr Place, Olcott Street, Selfridge Street and Nansen Street.

No. 48—Bounded approximately by the East River, Lange Place, Chelsea Street, Villaview Road, Eldorado Street, Boston Street, Haviland Street, Gower Avenue, Jameson Street, Inman Avenue, Lebanon Street, Kinney Avenue, Kelford Street, Lessing Avenue, Jameson Street, Mulford Avenue and Flushing Bay.

No. 114—Bounded approximately by the Brooklyn Borough Line (Mill Creek and Spring Creek), Fairfield Avenue, Emerald Street, Vandalia Avenue, Genesee Street, Dunham Avenue, Emerald Street and Egan Street.

No. 115—Bounded approximately by North Conduit Avenue, Boyd Avenue, Stanley Avenue, Oswego Street, Wortman Avenue, Niagara Street, Cozine Avenue, Kennebec Street, Fairfield Avenue, Iroquois Street, Vandalia Avenue, Sapphire Street, Fairfield Avenue and the Brooklyn Borough Line.

No. 123—Bounded approximately by Freedom Avenue, Liberty Avenue, Portland Avenue, Kimball Avenue, Napier Avenue, Jerome Avenue, Hamilton Avenue, Kimball Avenue, Lefferts Avenue, Roanoke Avenue, Ohio Street, Suwanee Avenue, Birch Street, Tuckahoe Avenue, Walnut Street, Ulster Avenue, Cedar Avenue, Sutter Avenue, Peconic Avenue and Rockaway Boulevard.

No. 125—Bounded approximately by Iroquois Street, Fairfield Avenue, Merrimac Avenue, Wortman Avenue, Boyd Avenue, South Conduit Avenue, Galveston Avenue, Cozine Avenue, Channel Street, Vandalia Avenue, Cohancy Avenue, Dunham Avenue, Killarney Avenue, Flynn Avenue, Woodhaven Avenue, Grimm Avenue, Potomac Street, Egan Avenue, Merrimac Avenue and Dunham Avenue.

No. 127—Bounded approximately by Passaic Street, Roanoke Avenue, Miriam Avenue, Liberty Avenue, Baker Avenue, Blanco Place, Van Wyck Avenue, Warburton Avenue, Atfield Avenue, Vistula Avenue, Warren Street, Ulster Avenue, Shoshone Street, Tuckahoe Avenue, Quebec Street and Suwanee Avenue.

No. 175—Bounded approximately by Peconic Avenue, Greenwood Avenue, Dumont Avenue, Cedar Avenue, Blake Avenue, Lefferts Avenue, Dumont Avenue, Raritan Street, North Conduit Avenue, Panama Street and Fairfield Avenue.

No. 231—Bounded approximately by Beach 32nd Street, Dickens Avenue, Beach 29th Street north, Ocean Crest Avenue, Beach 25th Street, Cornaga Avenue, Beach 24th Street north, Bay Park Avenue, Dickens Avenue, Mott Avenue, Caffrey Street, Beach 17th Street, Seagirt Avenue, Beach 19th Street, Ocean Promenade, Beach 22nd Street, Seagirt Avenue, Beach 25th Street, Edgemere Avenue, Beach 28th Street, Deerfield Road, Beach 30th Street north and Brookhaven Avenue.

FINAL SECTIONS—PREPARED AND FORWARDED TO THE BOARD OF ESTIMATE AND APPORTIONMENT FOR CERTIFICATION AND FILING.

No. 4—Bounded approximately by Gosman Avenue, Jackson Avenue, Sixteenth Avenue, Patterson Avenue, Seventh Street, Burnside Avenue, Ninth Street, Jackson Avenue, Seventh Street, Broadway, Sixth Street, Stryker Avenue, Fifth Street, Woodside Avenue and Middleburg Avenue.

No. 44—Bounded approximately by Woodhaven Avenue, Cornell Street, Orville Street, Fleet Street, Thornton Street, Roxton Street, Main Line Division of the Long Island Railroad, Greenway Terraces, Middlemay Place, Box Street, Slocum Crescent, Continental Avenue, Metropolitan Avenue, Orr Place, Olcott Street, Selfridge Street and Nansen Street.

No. 46—Bounded approximately by Johanna Place, Metropolitan Avenue, Rodman Avenue, Greenway Terraces, Middlemay Circle, Bay Street, Burns Street, Ascan Avenue, Burns Street, Puritan Avenue, Austin Street, Quentin Street, Grenfell Avenue, Onslow Place, Park Lane, Abington Road, Audley Street, Mayfair Road, Park Lane, Metropolitan Avenue and Union Turnpike.

No. 122—Bounded approximately by Cedar Avenue, Beaufort Avenue, Walnut Street, Atlantic Avenue, Maure Avenue, Chichester Avenue, Baker Avenue, Kimball Avenue, Frost Avenue, Liberty Avenue, Miriam Avenue, Roanoke Avenue, Neosho Street, Liberty Avenue, Church Street, Kimball Avenue, Walnut Street and Jerome Avenue.

No. 123—Bounded approximately by Freedom Avenue, Liberty Avenue, Portland Avenue, Kimball Avenue, Napier Avenue, Jerome Avenue, Hamilton Avenue, Kimball Avenue, Lefferts Avenue, Roanoke Avenue, Ohio Street, Suwanee Avenue, Birch Street, Tuckahoe Avenue, Walnut Street, Ulster Avenue, Cedar Avenue, Sutter Avenue, Peconic Avenue and Rockaway Boulevard.

No. 126—Bounded approximately by Missouri Street, Rockaway Boulevard, Hamilton Avenue, Ulster Avenue, Church Street, Tuckahoe Avenue, Neosho Street, Suwanee Avenue, Quebec Street, Tuckahoe Avenue, Shoshone Street, Ulster Avenue, Maure Avenue, Vistula Avenue, Atfield Avenue, Yukon Avenue, Warren Street, Sutter Avenue, Shoshone Street, Dumont Avenue, Panama Street and Blake Avenue.

No. 175—Bounded approximately by Peconic Avenue, Greenwood Avenue, Dumont Avenue, Cedar Avenue, Blake Avenue, Lefferts Avenue, Dumont Avenue, Raritan Street, North Conduit Avenue, Panama Street and Fairview Avenue.

FINAL MAPS—COMPLETED AND FORWARDED TO THE BOARD OF ESTIMATE AND APPORTIONMENT FOR APPROVAL.

Map establishing the lines and grades of *Sutphin Road*, from Jamaica Avenue to Hillside Avenue. (T. B. No. 46.)

Map establishing a street system for the *Queens-Hollis* section. (T. B. No. 458.)

Map establishing the lines and grades of *166th Street*, from Hillside Avenue to Gilman Avenue. (T. B. No. 459.)

Map establishing the lines and grades of *New York Avenue*, from South Street to Basley Avenue. (T. B. No. 470.)

Map establishing a street system for the *Auburndale* Section. (T. B. No. 437.)

Map establishing the lines and grades of *191st Street*, from Hillside Avenue to Palo Alto Avenue. (T. B. No. 480.)

Map establishing the lines and grades of *New York Avenue*, from Baisley Avenue to Rockaway Road. (T. B. No. 490.)

Map establishing the lines and grades of *Boerum Avenue*, from Bayside Avenue to Whitestone Division of the Long Island Railroad. (T. B. No. 487.)

FINAL MAPS—PREPARED AND FORWARDED TO THE BOARD OF ESTIMATE AND
APPORTIONMENT FOR CERTIFICATION AND FILING.

Map establishing the lines and grades of *Wainscot Avenue*, from Beechhurst Avenue to Bell Avenue. (T. B. No. 415.)

Map establishing the lines and grades of *Beach Channel Drive*, from Beach 85th Street to Beach 116th Street. (T. B. No. 394.)

Map establishing the street system for the territory bounded by Jamaica Avenue, Ezra Street, Archer Street and Van Wyck Avenue. (T. B. No. 418.)

Map establishing the lines and grades of *Yale Avenue*, from Jamaica Avenue to Hillside Avenue. (T. B. No. 370.)

Map establishing the lines and grades of *Sutphin Road*, from Hillside Avenue to Jamaica Avenue. (T. B. No. 456.)

ALTERATION MAPS—COMPLETED AND FORWARDED TO THE BOARD OF ESTIMATE AND
APPORTIONMENT FOR APPROVAL.

Map altering the grades of *Grand Avenue*, from Steinway Avenue to Eleventh Avenue. (T. B. No. 430.)

Map altering the grades of *Lefferts Avenue*, from Tuckahoe Avenue to Vistula Avenue. (T. B. No. 431.)

Map altering the lines and grades of *Franklin Street*, from Remsen Street to Willow Street. (T. B. No. 434.)

Map showing a change in the street system, by closing *Trains Meadow Road*, from Jackson Avenue to Elmhurst Avenue. (T. B. No. 429.)

Map altering the lines of *Queens Boulevard*, from Caldwell Avenue to Hillside Avenue. (T. B. No. 432.)

Map altering the grades of *Ashland Street*, from Diamond Street to Freedom Avenue. (T. B. No. 433.)

Map altering the lines of *Richard Avenue*, from Edsall Avenue to Central Avenue. (T. B. No. 435.)

Map altering the lines of *Fulton Street*, from Herald Avenue to Bedford Avenue. (T. B. No. 436.)

Map reducing the width of *46th Street*, from Astoria Avenue to Roosevelt Avenue. (T. B. No. 438.)

Map altering the lines and grades of *Maspeth Avenue*, from Maurice Avenue to Clermont Avenue. (T. B. No. 413.)

Map altering the width of *Sutphin Road*, from Rocton Street to Rockaway Boulevard. (T. B. No. 439.)

Map showing four parcels of land at *Clark Avenue*, to be acquired for sewer easement. (T. B. No. 440.)

Map altering the grades of *Cypress Avenue*, from Decatur Street to Armand Place. (T. B. No. 442.)

Map altering the lines of *Flushing River*, from Gilroy Avenue to Livingston Street. (T. B. No. 443.)

Map altering the lines of *Polk Avenue*, from Junction Avenue to Baylies Street. (T. B. No. 424.)

Map altering the lines of *Queens Boulevard*, from Booth Street to Continental Avenue. (T. B. No. 445.)

Map altering the lines of *Bodine Street*, from Vernon Avenue to Sherman Place. (T. B. No. 444.)

Map altering the grades of *Harvard Place*, from Canonbury Road to Jamaica Avenue. (T. B. No. 446.)

Map altering the lines of *Spangler Street* and *Smith Street*, from Lambertville Avenue to Ulster Avenue. (T. B. No. 447.)

Map altering the *United States Pier* and *Bulkhead Lines* of Jamaica Bay, from Beach 116th Street to the Rockaway Beach Division of the Long Island Railroad. (T. B. No. 448.)

Map filing the curb lines on *Second Avenue* and on *Flushing Avenue*. (T. B. No. 450.)

Map establishing the lines and grades of *Chickering Place*, from Mitchell Avenue to Alice Place. (T. B. No. 452.)

Map altering the grades of *Bathgate Avenue*, from Mitchell Avenue to Bayside Avenue. (T. B. No. 454.)

Map establishing the lines and grades of *Nassau Avenue*, from Grand Street to Corinth Street. (T. B. No. 453.)

Map altering the grades of *Greenpoint Avenue*, from Starr Avenue to Newtown Creek. (T. B. No. 340.)

Map altering the grades of *Beddard Street*, from Parsons Avenue to Percy Street. (T. B. No. 455.)

Map altering the grades of *California Avenue*, from Jaggar Avenue to McDonald Street. (T. B. No. 460.)

Map altering the lines of *Schurz Avenue*, from Ditmars Avenue to Berrian Avenue. (T. B. No. 461.)

Map eliminating *Frederick Street*, from Garrison Avenue to Creek Street. (T. B. No. 462.)

Map altering the lines and grades of *Grand Avenue*, from 33rd Street to 40th Street. (T. B. No. 457.)

Map altering the grades of *Murray Street*, from Alice Street to Jackson Avenue. (T. B. No. 464.)

Map altering the lines of *Columbine Avenue*, from Laurel Hill Boulevard to Montgomery Avenue. (T. B. No. 463.)

Map altering the grades of *Steinway Avenue*, from Wolcott Avenue to Ditmars Avenue. (T. B. No. 466.)

Map altering the grades of *Broadway*, at 8th Street. (T. B. No. 465.)

Map altering the grades of *Van Alst Avenue*, from 13th Street to South Jane Street. (T. B. No. 467.)

Map altering the lines of *Corona Avenue*, from Broadway to Maurice Avenue. (T. B. No. 472.)

Map altering the grades of *Toledo Street*, from Gerry Avenue to Ivy Street. (T. B. No. 468.)

Map establishing the lines of *Aurelia Place*, from Flushing Avenue to Newtown Avenue. (T. B. No. 407.)

Map altering the lines of *Proctor Street*, from St. Germans Street to Edsall Avenue. (T. B. No. 469.)

Map altering the grades of *Firth Avenue*, from Whitlock Avenue to Dorothy Place. (T. B. No. 471.)

Map establishing the lines and grades of *Queens Boulevard*, through Maple Grove Cemetery. (T. B. No. 451.)

Map altering the street system of *Ivanhoe Park*. (T. B. No. 329.)

Map altering the lines and grades of *Corona Avenue*, from Alstyne Avenue to Hanover Avenue. (T. B. No. 473.)

Map establishing the angles on *Elderts Lane*, from Jamaica Avenue to Atlantic Avenue. (T. B. No. 474.)

Map eliminating *Lurting Street*, from Card Place to Corona Avenue. (T. B. No. 475.)

Map altering the grades of *Front Street*, from Borden Avenue to Newtown Creek. (T. B. No. 477.)

Map establishing the street lines and grades along the *Lutheran Cemetery Branch* of the *Brooklyn Rapid Transit*, from the Brooklyn Borough Line to Metropolitan Avenue. (T. B. No. 476.)

Map altering the grades of *Decatur Street*, from Irving Avenue to Wyckoff Avenue. (T. B. No. 481.)

Map altering the lines of *Justice Street*, from Broadway to Junction Avenue. (T. B. No. 478.)

Map altering the lines of *Bayreuth Street*, from Murray Street to Dutchess Street. (T. B. No. 486.)

Map correcting a block dimension of *Burrough Avenue*, between Railroad Avenue and Garfield Street. (T. B. No. 484.)

Map altering the lines of *44th Street* and *45th Street*, from Sackett Street to Roosevelt Avenue. (T. B. No. 482.)

Map altering the lines of *Maywood Street*, from Carlisle Street to Medford Street. (T. B. No. 491.)

Map reducing the width of *Broadway*, from Baxter Avenue to Queens Boulevard. (T. B. No. 488.)

Map reducing the width of *Maure Avenue*, from Jamaica Avenue to Jerome Avenue. (T. B. No. 492.)

Map altering the lines of *Brevoort Street*, from Cuthbert Place to Metropolitan Avenue. (T. B. No. 494.)

Map altering the lines and grades of *Yellowstone Avenue*, from Colonial Avenue to Queens Boulevard. (T. B. No. 493.)

Map reducing the width of *Junction Avenue*, from Burnside Avenue to Corona Avenue. (T. B. No. 483.)

Map altering the lines of *Vermont Avenue*, from Highland Boulevard to Tappen Terrace. (T. B. No. 479.)

Map altering the grades of *Queens Boulevard*, from Grand Street to Hillside Avenue. (T. B. No. 495.)

Map altering the grades of *Nelson Avenue*, from Hulst Street to Madden Street. (T. B. No. 496.)

Map altering the lines of *Lawn Avenue*, *Freedom Avenue* and *McCormack Avenue*, from Roanoke Avenue to Liberty Avenue. (T. B. No. 498.)

Map establishing the lines of the streets crossing the Long Island Railroad (Montauk Division), between Forest Park and Jamaica Avenue. (T. B. No. 497.)

Map establishing the lines of *Liberty Avenue*, from Blakely Street to Carlisle Street. (T. B. No. 499.)

Map establishing the lines and grades of *Rocton Street*, from Van Wyck Avenue to Roseville Avenue. (T. B. No. 500.)

Map altering the lines of *Hancock Street*, from Brooklyn Borough Line to Wyckoff Avenue. (T. B. No. 502.)

Map altering the grades of *Franklin Place*, from Kissena Road to Macdonald Street. (T. B. No. 501.)

ALTERATION MAPS—PROPOSED AND FORWARDED TO THE BOARD OF ESTIMATE AND APPORTIONMENT FOR CERTIFICATION AND FILING.

Map altering the grades of *Queens Boulevard*, from Van Dam Street, to Grand Street. (T. B. No. 388.)

Map eliminating *Rawson Street*, *Buckley Street* and *Moore Street*, south of Jackson Avenue. (T. B. No. 397.)

Map altering the lines of *Caspian Street*, from Collins Avenue to Eliot Avenue. (T. B. No. 387.)

- Map altering the lines of *Atlantic Avenue*, from Thrall Avenue to Spruce Street. (T. B. No. 404.)
- Map altering the grade of *Anable Avenue*, at Hulst Street. (T. B. No. 401.)
- Map altering the grades of *Liberty Avenue*, at the Rockaway Beach Division of the Long Island Railroad. (T. B. No. 405.)
- Map altering the lines of *Cornelia Street*, from Myrtle Avenue to Cypress Avenue. (T. B. No. 386.)
- Map altering the lines of *Wurster Street*, from Corona Avenue to Riverside Avenue. (T. B. No. 341.)
- Map altering the lines of *Medina Place*, from Corona Avenue to Parcell Street. (T. B. No. 292.)
- Map altering the grades of *Union Street*, from Donnelly Avenue to the Long Island Railroad. (T. B. No. 398.)
- Map altering the lines of *Eighth Street*, from Hayes Avenue to Broadway. (T. B. No. 373.)
- Map altering the lines of *Calamus Avenue*, from Delafield Street to Grand Street. (T. B. No. 389.)
- Map showing a change in the street system bounded by North Villa Street, Ridgewood Avenue, Maure Avenue, Sycamore Place, Atfield Place, Long Island Railroad, Van Wyck Avenue, Garden Street, South Morris Avenue, Long Island Railroad, Wisner Place, North Wickes Street and Fulton Place. (T. B. No. 422.)
- Map altering the lines of *Woodhaven Avenue*, from Jamaica Avenue to Atlantic Avenue. (T. B. No. 414.)
- Map altering the lines of *Queens Boulevard*, from Van Loon Place to Caldwell Avenue. (T. B. No. 350.)
- Map establishing the lines and grades of *Queens Boulevard*, through Maple Grove Cemetery. (T. B. No. 451.)
- Map altering the Street System in the *Elmhurst Section*. (T. B. No. 302.)
- Map altering the lines of *Queens Boulevard*, from Caldwell Avenue to Hillside Avenue. (T. B. No. 432.)
- Map altering the lines and grades of *Clermont Avenue*, from Maspeth Avenue to Fresh Pond Road. (T. B. No. 406.)
- Map altering the lines of *Queens Boulevard*, from Booth Street to Continental Avenue. (T. B. No. 445.)
- Map establishing a public park at *Young Street* and *Borden Avenue*. (T. B. No. 354.)
- Map altering the grades of *Seventh Avenue*, from Jamaica Avenue to Grand Avenue. (T. B. No. 421.)
- Map altering the grades of *Myrtle Avenue*, from Ridgewood Place to Martha Place. (T. B. No. 403.)
- Map altering the lines of *Maspeth Avenue*, from Maurice Avenue to Clermont Avenue. (T. B. No. 413.)
- Map altering the lines of *Yellowstone Avenue*, from Croton Street to Queens Boulevard. (T. B. No. 400.)
- Map establishing the lines and grades of *Ziegler Avenue*, from Amity Street to Donnelly Avenue. (T. B. No. 381.)
- Map establishing the grades of *Lefferts Avenue*, from Tuckahoe Avenue to Vistula Avenue. (T. B. No. 431.)
- Map establishing the lines and grades of *Yale Avenue*, from Hillside Avenue to Jamaica Avenue. (T. B. No. 370.)
- Map altering the lines of *Stanhope Street*, from Amory Avenue to Metropolitan Avenue. (T. B. No. 411.)
- Map reducing the width of *Bodine Street*, from Vernon Avenue to Sherman Place. (T. B. No. 444.)

Map altering the grades of *McKinley Avenue*, from Myrtle Avenue to Central Avenue. (T. B. No. 365.)

Map reducing the width of *Sutphin Road*, from Rocton Street to Rockaway Boulevard. (T. B. No. 439.)

Map altering the grades of *Cypress Avenue*, from Decatur Street to Armand Place. (T. B. No. 442.)

Map altering the lines of *Milton Street*, at Flushing Avenue. (T. B. No. 378.)

Map altering the lines of *Trowbridge Street*, from Willow Street to Van Alst Avenue. (T. B. No. 379.)

Map altering the lines of *Franklin Street*, from Remsen Street to Willow Street. (T. B. No. 434.)

Map altering the lines of *Richard Avenue*, from Edsall Avenue to Central Avenue. (T. B. No. 435.)

Map altering the grades of *Greenpoint Avenue*, from Newtown Creek to Starr Avenue. (T. B. No. 340.)

Map altering the grades of *Harvard Avenue*, from Canonbury Road to Jamaica Avenue. (T. B. No. 446.)

Map establishing the lines and grades of *Interborough Parkway*, from Fresh Pond Road to Forest Park. (T. B. No. 410.)

Map establishing the lines and grades of *Spangler and Smith Streets*, from Lambertville Avenue to Ulster Avenue. (T. B. No. 447.)

Map altering the lines of *Maywood Street*, from Carlisle Street to Medford Street. (T. B. No. 491.)

Map altering the grades of *Murray Street*, from Alice Street to Jackson Avenue. (T. B. No. 464.)

Map altering the grades of *Bathgate Street*, from Mitchell Avenue to Bayside Avenue. (T. B. No. 454.)

Map altering the grades of *Decatur Street*, from Irving Avenue to Wyckoff Avenue. (T. B. No. 481.)

Map altering the lines of *St. James Street* and *Corona Avenue*, from Poyer Street to Broadway. (T. B. No. 472.)

FINAL SECTIONS—NOW BEING MAPPED.

No. 124—Vicinity of Rockaway Beach Division of Long Island Railroad and Centerville Avenue, Aqueduct.

No. 174—Vicinity of Crum Creek, Aqueduct.

No. 176—Vicinity of Hawtree Creek, Aqueduct.

No. 177—Vicinity of Flat Creek, Aqueduct.

No. 188—Vicinity of Bergen Creek, Aqueduct.

No. 189—Vicinity of Bergen Landing Road and Old South Road, Aqueduct.

No. 313—Vicinity of Newtown Creek and Review Avenue, L. I. City.

No. 314—Vicinity of Borden Avenue and Van Dam Street, L. I. City.

MISCELLANEOUS MAPS, SKETCHES, PROFILES, STUDIES, ETC., MADE.

Sketch showing abolishment of *Fitch Avenue*.

Plan and Profile of *Union Street*, from Donnelly Avenue to the Long Island Railroad.

Profiles of *Church Street*, *Audley Street*, *Lefferts Avenue* and *Birch Street*, from St. Ann's Avenue to Ashland Street.

Map showing the different pavements on *Cypress Hills Road*.

Study to partly eliminate *Cornelia Street*, between Fresh Pond Road and Shaler Street.

Study to partly eliminate *Brandon Avenue*.

Study for a change in the street system for *Flushing Meadows*.

Sketch showing rearrangement of marginal streets along *Flushing River*.
 Sketch showing the buildings, with their valuation, on *Aurelia Place*.
 Profile of *Beddard Street*, from Percy Street to Ziegler Avenue.
 Study for an extensive change in the street system in the *Juniper Swamp Section*.
 Sketch showing the buildings, with their valuation, in *Ivanhoe Park*.
 Map showing location of and grades of *Jamaica Avenue*, from the Brooklyn Borough Line to Cliffside Avenue. Copy sent to Public Service Commission.
 Profiles of *Liberty Avenue*, from the Brooklyn Borough Line to Van Wyck Avenue, and intersecting streets. Sent to the Board of Assessors.
 Profile of *Liberty Avenue*, from Ferry Street to Seattle Street.
 Profiles of *Thedford Street*, Hatch Street, Vandever Avenue and Ocean Avenue.
 Sketch showing the buildings, with their valuation, on *Fulton Street*, Jamaica.
 Sketch showing the buildings on *Bayreuth Street*, from Murray Street to Dutchess Street.
 Sketch showing the buildings, with their valuation, on *Maure Avenue*, from Atlantic Avenue to Jerome Avenue. Sent to the Board of Estimate and Apportionment.
 Sketch of *Fresh Pond Road*, from Myrtle Avenue to the Brooklyn Borough Line. Sent to the Board of Assessors.
 Study for the elimination of *Ridgewood Avenue*.
 Sketch showing the buildings, with their valuation, on *Metz Avenue*, from Fisk Avenue to Hillcrest Avenue.
 Sketch showing the buildings, with their valuation, on *Ridgewood Avenue* and *Fulton Street*.
 A study for altering the street system shown on the Black Stump Tentative Map, in the vicinity of *Motor Parkway*.
 Sketch showing the buildings, with their valuation, on *Bramdon Avenue*.
 Sketch showing the buildings, with their valuation, on *Junction Avenue*.
 Sketch showing *Astoria Avenue*, as in use.
 Sketch showing the buildings on *Howell Avenue*.
 Map showing the buildings, with their valuation, in the territory covered by Final Section 48.
 Sketch showing the buildings, with their valuation, on *Broadway* from Newtown Road to Queens Boulevard.

MISCELLANEOUS DRAUGHTING-ROOM WORK.

Office Monument Sheets—completed. Nos. 37, 47, 111, 178, 180, 192, 194, 195, 208, 209, 211, 224, 226, 241, 433, 440, 620, 626, 627.

Sewerage District Drainage Plans—checked. Nos. 20-IV., 21, 21g, 22, 23, 24, 24A, 28, 40, 40A, (10), 40B, (8).

Center-line elevations plotted on 80 ft. sheets.....	52.8 miles
Center-line elevations plotted on 200 ft. tracings.....	131.6 miles
Street systems and old roads plotted on 80 ft. sheets.....	1,111.0 acres
Street systems and old roads plotted on 200 ft. sheets.....	1,724.0 acres
Street systems and old roads traced on 200 ft. tracings.....	626.0 acres
Area of 80 ft. sheets prepared.....	1,740.0 acres
Area of 200 ft. sheets prepared.....	1,593.0 acres
Area 200 ft. tracings prepared.....	4,163.0 acres

STREET OPENING DIVISION.

SURVEYING CORPS.

STREET OPENING SURVEYS—COMPLETED.

**Ziegler Avenue*—Bayreuth Street to Willets Point Road.
Marston Avenue—Murray Street to Dunsing Street.
Dunsing Street—Marston Avenue to Matthew Place.
Matthew Place—Dunsing Street to Hoogland Street.
Ely Avenue—Jackson Avenue to Nott Avenue.
Whitney Street—Academy Street to Crescent.
Van Pelt Street—Borden Avenue to Skillman Avenue.
Sothorn Avenue—Queens Boulevard to Lurting Street.
Seneca Avenue—Brooklyn Borough Line to DeKalb Avenue, and Summerfield Street to St. Felix Avenue.
Ulster Avenue—Smith Street to Westchester Avenue.
Westchester Avenue—Ulster Avenue to 117th Avenue.
117th Avenue—Westchester Avenue to Dearborn Avenue.
Dearborn Avenue—117th Avenue to Queens-Nassau Line.

* Started last year.

STREET OPENING SURVEYS—NOT COMPLETED.

Sutphin Road—Hillside Avenue to Jamaica Avenue, and Long Island Railroad to Rockaway Boulevard.
Campion Street—Jamaica Avenue to Archer Street.

OFFICE CORPS.

RULE MAPS—COMPLETED.

	Feet.
<i>Ditmars Avenue</i> —Old Bowery Bay Road to 43d Street.....	8,380
<i>Bayreuth Street</i> —Parsons Avenue to Dutchess Street.....	2,530
<i>Amity Street</i> —Wateredge Avenue to Main Street.....	2,375
<i>Marston Avenue</i> —Murray Street to Dunsing Street.....	855
<i>Dunsing Street</i> —Marston Avenue to Matthew Place.....	182
<i>Matthew Place</i> —Dunsing Street to Hoogland Street.....	1,040
* <i>Twelfth Street</i> —Fillmore Avenue to Bulkhead Line of East River.....	9,687
* <i>Riker Avenue</i> —Steinway Avenue to Twelfth Street.....	2,850
<i>Ely Avenue</i> —Jackson Avenue to Nott Avenue	600
<i>Fulton Street</i> —Fisk Avenue to Plover Place	2,400
<i>Ninth Street</i> —Broadway to Jackson Avenue	1,300
<i>Tenth Street</i> —Broadway to Jackson Avenue.....	1,520
<i>Peel Street</i> —Broadway to Hayes Avenue.....	1,050
<i>St. Felix Avenue</i> —Alden Avenue to Old Bergen Avenue.....	1,055
<i>Proctor Street</i> —Metropolitan Avenue to Myrtle Avenue	3,835
<i>McComb Place</i> —Myrtle Avenue to Edsall Avenue.....	1,550
<i>Kew Gardens Road</i> —Union Turnpike to Iris Place.....	2,500
<i>Gleane Street</i> —Baxter Avenue to Kingsland Avenue.....	2,850
<i>Hampton Street</i> —Baxter Avenue to Kingsland Avenue.....	2,640
* <i>Liberly Avenue</i> —Brooklyn Borough Line to Van Wyck Avenue.....	15,540
* <i>St. James Street</i> —Maurice Avenue to Broadway.....	960
* <i>Corona Avenue</i> —Maurice Avenue to Broadway.....	630

* Amended Map.

	Feet.
* <i>Queens Boulevard</i> —Van Dam Street to Hillside Avenue.....	35,000
<i>Sutphin Road</i> —Long Island Railroad to Rockaway Boulevard (with Public Place at intersection with Rockaway Boulevard).....	12,925
<i>Campion Street</i> —Jamaica Avenue to Archer Street.....	1,200
<i>Burrough Avenue</i> —Borden Avenue to Woodside Avenue.....	5,730
<i>Mazeau Street</i> —Falkner Street to Metropolitan Avenue.....	6,850
<i>Whitney Street</i> —Crescent to Academy Street.....	7,112
* <i>Corona Avenue</i> —Hampton Street to Rodman Street.....	9,000
† <i>Milton Street</i> —Flushing Avenue to Grand Street.....	1,050
<i>Caldwell Avenue</i> —Harriet Avenue to Queens Boulevard.....	7,240
<i>Schroeder Place</i> —Queens Boulevard to Woodside Avenue.....	1,112
<i>Ziegler Avenue</i> —Bayreuth Street to Willets Point Road.....	6,470
<i>Seventeenth Avenue</i> —Winthrop Avenue to Berrian Avenue.....	1,855
<i>Seneca Avenue</i> —Brooklyn Borough Line to DeKalb Avenue, and Summerfield Street to St. Felix Avenue.....	1,440
<i>Van Pelt Street</i> —Borden Avenue to Skillman Avenue.....	3,725
<i>Columbia Avenue</i> —Laurel Hill Boulevard to Queens Boulevard.....	170
* <i>Opdyke Street</i> —Alburtis Avenue to Tiemann Avenue.....	1,679
* <i>Richard Avenue</i> —Myrtle Avenue to Otto Street.....	1,645
Total length of Rule Maps completed.....	164,532

RULE MAPS—NOT COMPLETED.

	Feet.
† <i>Rockaway Boulevard</i> —Elderts Lane to Ocean Avenue.....	7,670
<i>Radcliffe Street</i> —Waldron Street to Hewitt Avenue.....	5,645
<i>Strong Street</i> —Waldron Street to Hewitt Avenue.....	5,780
Total length of Rule Maps not completed.....	19,095

DRAFT DAMAGE MAPS—COMPLETED.

	Feet.
<i>Riker Avenue</i> —Steinway Avenue to 12th Street.....	2,850
<i>Marston Avenue</i> —Murray Street to Dunsing Street.....	855
<i>Dunsing Street</i> —Marston Avenue to Matthew Place.....	182
<i>Matthew Place</i> —Dunsing Street to Hoogland Street.....	1,040
<i>Bayreuth Street</i> —Parsons Avenue to Dutchess Street.....	2,530
† <i>Amity Street</i> —Wateredge Avenue to Main Street.....	2,375
* <i>Twelfth Street</i> —Fillmore Avenue to Bulkhead Line of East River.....	9,687
† <i>Ditmars Avenue</i> —Old Bowefy Bay Road to 43rd Street.....	8,380
<i>Fulton Street</i> —Fisk Avenue to Plover Place.....	2,400
<i>Ninth Street</i> —Broadway to Jackson Avenue.....	1,300
<i>Tenth Street</i> —Broadway to Jackson Avenue.....	1,520
<i>Peel Street</i> —Broadway to Hayes Avenue.....	1,050
<i>Gleane Street</i> —Baxter Avenue to Kingsland Avenue.....	2,850
<i>Hampton Street</i> —Baxter Avenue to Kingsland Avenue.....	2,640
<i>Ely Avenue</i> —Jackson Avenue to Nott Avenue.....	600
<i>St. Felix Avenue</i> —Alden Avenue to Old Bergen Avenue.....	1,055
† <i>Liberty Avenue</i> —Brooklyn Borough Line to Van Wyck Avenue.....	15,540
<i>Proctor Street</i> —Metropolitan Avenue to Myrtle Avenue.....	3,835
<i>McComb Place</i> —Myrtle Avenue to Edsall Avenue.....	1,550

†Started last year, or earlier.

*Amended Maps.

	Feet.
<i>Kew Gardens Road</i> —Union Turnpike to Iris Place.....	2,500
* <i>St. James Street</i> —Maurice Avenue to Broadway.....	960
* <i>Corona Avenue</i> —Maurice Avenue to Broadway.....	630
* <i>Queens Boulevard</i> —Van Dam Street to Hillside Avenue.....	35,000
<i>Burrough Avenue</i> —Borden Avenue to Woodside Avenue.....	5,730
<i>Mazeau Street</i> —Falkner Street to Metropolitan Avenue.....	6,850
<i>Whitney Street</i> —Crescent to Academy Street.....	1,112
* <i>Corona Avenue</i> —Hampton Street to Rodman Street.....	9,000
† <i>Milton Street</i> —Flushing Avenue to Grand Street.....	1,050
<i>Ziegler Avenue</i> —Bayreuth Street to Willets Point Road.....	6,470
<i>Caldwell Avenue</i> —Harriet Avenue to Queens Boulevard.....	7,240
<i>Schroeder Place</i> —Queens Boulevard to Woodside Avenue.....	1,112
<i>Seventeenth Avenue</i> —Winthrop Avenue to Berrian Avenue.....	1,855
<i>Seneca Avenue</i> —Brooklyn Borough Line to DeKalb Avenue, and Summerfield Street to St. Felix Avenue.....	1,440
<i>Van Pelt Street</i> —Borden Avenue to Skillman Avenue.....	3,725
<i>Columbia Avenue</i> —Laurel Hill Boulevard to Queens Boulevard.....	170
* <i>Opdyke Street</i> —Alburtis Avenue to Tiemann Avenue.....	1,679
* <i>Richard Avenue</i> —Myrtle Avenue to Otto Street.....	1,645

Total length of Draft Damage Maps completed..... 150,407

DRAFT DAMAGE MAPS—NOT COMPLETED.

	Feet.
† <i>Rockaway Boulevard</i> —Elderts Lane to Ocean Avenue.....	7,670
† <i>Forest Avenue</i> —Metropolitan Avenue to Catalpa Avenue; Halleck Avenue to Myrtle Avenue, and Summerfield Street to Long Island Railroad....	4,600
† <i>Alden Avenue</i> —Long Island Railroad to Pansy Street.....	2,500
† <i>Fresh Pond Road</i> —Myrtle Avenue to 200 ft. south of Anna Place.....	2,680
† <i>Firth Avenue</i> —Grand Street to Metropolitan Avenue.....	5,900
<i>Radcliffe Street</i> —Waldron Street to Hewitt Avenue.....	5,645
<i>Strong Street</i> —Waldron Street to Hewitt Avenue.....	5,780
<i>Sutphin Road</i> —Hillside Avenue to Jamaica Avenue, and Long Island Railroad to Rockaway Boulevard.....	12,925
<i>Campion Street</i> —Jamaica Avenue to Archer Street.....	1,200
<i>Ulster Avenue</i> —Smith Street to Westchester Avenue.....	
<i>Westchester Avenue</i> —Ulster Avenue to 117th Avenue.....	
<i>117th Avenue</i> —Westchester Avenue to Dearborn Avenue.....	
<i>Lowell Avenue</i> —Metropolitan Avenue to Woodhaven Avenue.....	6,270

Total length of Draft Damage Maps not completed..... 72,170

PROFILE MAPS—COMPLETED.

	Feet.
<i>Riker Avenue</i> —Steinway Avenue to Twelfth Street.....	2,850
<i>Marston Avenue</i> —Murray Street to Dunsing Street.....	855
<i>Dunsing Street</i> —Marston Avenue to Matthew Place.....	182
<i>Matthew Place</i> —Dunsing Street to Hoogland Street.....	1,040
<i>Bayreuth Street</i> —Parsons Avenue to Dutchess Street.....	2,530
<i>Amity Street</i> —Wateredge Avenue to Main Street.....	2,375
<i>Twelfth Street</i> —Fillmore Avenue to Bulkhead Line of East River.....	9,687

† Started last year, or earlier.

* Amended Map.

	Feet.
<i>Ely Avenue</i> —Jackson Avenue to Nott Avenue.....	600
<i>St. Felix Avenue</i> —Alden Avenue to Old Bergen Avenue.....	1,055
<i>Fulton Street</i> —Fisk Avenue to Plover Place.....	2,400
<i>Ninth Street</i> —Broadway to Jackson Avenue.....	1,300
<i>Tenth Street</i> —Broadway to Jackson Avenue.....	1,520
<i>Peel Street</i> —Broadway to Hayes Avenue.....	1,050
<i>Proctor Street</i> —Metropolitan Avenue to Myrtle Avenue.....	3,835
<i>McComb Place</i> —Myrtle Avenue to Edsall Avenue.....	1,550
<i>Kew Gardens Road</i> —Union Turnpike to Iris Place.....	2,500
<i>Gleane Street</i> —Baxter Avenue to Kingsland Avenue.....	2,850
<i>Hampton Street</i> —Baxter Avenue to Kingsland Avenue.....	2,640
<i>Liberty Avenue</i> —Brooklyn Borough Line to Van Wyck Avenue.....	15,540
* <i>St. James Street</i> —Maurice Avenue to Broadway.....	960
* <i>Corona Avenue</i> —Maurice Avenue to Broadway.....	630
* <i>Cox Place</i> —Flushing Avenue to Broad Street.....	840
* <i>Marabel Avenue</i> —Maurice Avenue to Maspeth Avenue.....	1,850
* <i>Clermont Avenue</i> —Maurice Avenue to Fresh Pond Road.....	4,300
<i>Burrough Avenue</i> —Borden Avenue to Woodside Avenue.....	5,730
<i>Mazeau Street</i> —Falkner Street to Metropolitan Avenue.....	6,850
<i>Whitney Street</i> —Crescent to Academy Street.....	1,112
<i>Schroeder Place</i> —Queens Boulevard to Woodside Avenue.....	1,112
<i>Seventeenth Avenue</i> —Winthrop Avenue to Berrian Avenue.....	1,855
<i>Milton Street</i> —Flushing Avenue to Grand Street.....	1,050
<i>Seneca Avenue</i> —Brooklyn Borough Line to De Kalb Avenue, and Summerfield Street to St. Felix Avenue.....	1,440
<i>Van Pelt Street</i> —Borden Avenue to Skillman Avenue.....	3,725
<i>Ziegler Avenue</i> —Bayreuth Street to Willets Point Road.....	6,470
<i>Caldwell Avenue</i> —Harriet Avenue to Queens Boulevard.....	7,240
* <i>Opdyke Street</i> —Alburtis Avenue to Tiemann Avenue.....	1,679

Total length of Profile Maps completed..... 103,202

FINAL DAMAGE MAPS—COMPLETED.

	Feet.
<i>Clark Avenue</i> —Perry Avenue to Rust Street.....	2,300
<i>Perry Avenue</i> —Clark Avenue to Rust Street.....	39
<i>Rust Street</i> —Clinton Street to Flushing Avenue.....	3,520
<i>Seattle Street</i> —Chichester Avenue to Liberty Avenue.....	2,728
† <i>Onderdonk Avenue</i> —Metropolitan Avenue to Catalpa Avenue.....	7,350
† <i>Ashland Street</i> —Cypress Hills Cemetery to Myrtle Avenue; Birch Street to Spruce Street, and North Curtis Avenue to Metropolitan Avenue.....	8,930
† <i>Grove Street</i> —Woodward Avenue to Traffic Street.....	3,405
† <i>Ralph Street</i> —Grandview Avenue to Traffic Street.....	2,340
† <i>Vincent Street</i> —Ralph Street to Metropolitan Avenue.....	680
† <i>School Street</i> —Thomson Avenue to 100 ft. north of Nott Avenue.....	500
† <i>Hill Street</i> —Gale Street to Skillman Avenue.....	2,852
† <i>Rawson Street</i> —Hunterspoint Avenue to Skillman Avenue.....	2,802
† <i>Moore Street</i> —Hunterspoint Avenue to Skillman Avenue.....	3,022
† <i>Honeywell Street</i> —Hunterspoint Avenue to Queens Boulevard.....	2,220
† <i>Buckley Street</i> —Hunterspoint Avenue to Skillman Avenue.....	3,463
† <i>Weil Place</i> —Flushing Avenue to Washington Place.....	690
* <i>Cassel Avenue</i> —Washington Avenue to Jay Avenue.....	2,518

†Started last year, or earlier.

*Amended Maps.

	Feet.
† <i>Fiftieth Street</i> —Astoria Avenue to Polk Avenue.....	2,500
† <i>Fifty-first Street</i> —Flushing Bay to 100 ft. south of Polk Avenue; Corona Avenue to Queens Boulevard.....	12,500
† <i>Lake Street</i> —Junction Avenue to Alburtis Avenue.....	2,060
† <i>Banta Street</i> —Van Dam Street to Junction Avenue.....	930
† <i>Fourth Street</i> —Queens Boulevard to Jackson Avenue.....	4,500
† <i>Fifth Street</i> —Queens Boulevard to Woodside Avenue.....	1,400
† <i>Sixth Street</i> —Stryker Avenue to Seventh Street.....	2,050
† <i>Seventh Street</i> —Jackson Avenue to 150 ft. south of Stryker Avenue.....	2,800
† <i>Eighth Street</i> —Jackson Avenue to Woodside Avenue.....	3,350
<i>Towns Place</i> —Packard Street to Laurel Hill Avenue.....	460
<i>Remington Street</i> —Beaufort Avenue to Chichester Avenue.....	400
† <i>Skillman Avenue</i> —Woodside Avenue to angle between Van Pelt and Hulst Streets	5,230
* <i>Decatur Street</i> —Brooklyn Borough Line to Myrtle Avenue.....	4,000
* <i>Covert Avenue</i> —Brooklyn Borough Line to Wyckoff Avenue.....	840
* <i>Schaeffer Street</i> —Brooklyn Borough Line to Wyckoff Avenue.....	940
* <i>Cooper Street</i> —Brooklyn Borough Line to St. Felix Avenue.....	1,210
* <i>Cooper Place</i> —Wyckoff Avenue to Cypress Avenue.....	825
* <i>Irving Avenue</i> —Brooklyn Borough Line to Moffat Street.....	1,450
† <i>Yellowstone Avenue</i> —Queens Boulevard to Woodhaven Avenue.....	5,310
<i>East River Park</i> —Bounded by Ditmars Avenue, Barclay Street, Hoyt Avenue and East River.....	9,296
<i>South Villa Street</i> —Liberty Avenue to Jerome Avenue.....	1,171
<i>Ely Avenue</i> —Jackson Avenue to Nott Avenue.....	600
<i>Whitney Street</i> —Academy Street to Crescent.....	1,112
<i>Gerry Avenue</i> —Pike Street to Marlowe Avenue.....	4,180
<i>Pike Street</i> —Corona Avenue to Maurice Avenue.....	395
<i>Packard Street</i> —Myrtle Avenue to Otto Street.....	1,645
* <i>Broad Street</i> —Maspeth Avenue to Borden Avenue.....	4,780
Total length of Final Damage Maps completed.....	125,293

FINAL DAMAGE MAPS—NOT COMPLETED.

	Feet.
† <i>Calamus Avenue</i> —Maurice Avenue to Woodhaven Avenue.....	7,435
† <i>Opdyke Street</i> —Corona Avenue to Tiemann Avenue.....	2,030
† <i>Eliot Avenue</i> —Metropolitan Avenue to Mt. Olivet Avenue, and Edith Place to Queens Boulevard.....	10,160
† <i>Whitlock Avenue</i> —Brown Place to Calamus Avenue.....	5,250
† <i>Corona Avenue</i> —Hampton Street to Rodman Street.....	9,000
<i>Atlantic Avenue</i> —Brooklyn Borough Line to Van Wyck Avenue.....	15,255
<i>Kimball Avenue</i> —Liberty Avenue (near Digby Street), to Liberty Avenue (near Baker Street).....	12,250
Total Length of Final Damage Maps not completed.....	61,380

BENEFIT MAPS—COMPLETED.

	Acres.
<i>Grove Street</i> —Woodward Avenue to Traffic Street.....	45.5
<i>Ralph Street</i> —Grandview Avenue to Traffic Street.....	
<i>Vincent Street</i> —Ralph Street to Metropolitan Avenue.....	

†Started last year, or earlier.

*Amended Maps.

	Acres
<i>Clark Avenue</i> —Perry Avenue to Rust Street.....	31.4
<i>Perry Avenue</i> —Clark Avenue to Rust Street.....	
<i>Rust Street</i> —Clinton Avenue to Flushing Avenue.....	
<i>Seattle Street</i> —Chichester Avenue to Liberty Avenue.....	32.7
† <i>School Street</i> —Thomson Avenue to 100 ft. north of Nott Avenue.....	80.5
† <i>Hill Street</i> —Gale Street to Skillman Avenue	
† <i>Rawson Street</i> —Hunterspoint Avenue to Skillman Avenue.....	
† <i>Moore Street</i> —Hunterspoint Avenue to Skillman Avenue	185.5
† <i>Honeywell Street</i> —Hunterspoint Avenue to Queens Boulevard	
† <i>Buckley Street</i> —Hunterspoint Avenue to Skillman Avenue.....	
† <i>Ashland Street</i> —Cypress Hills Cemetery to Myrtle Avenue, Birch Street to Spruce Street, and North Curtis Avenue to Metropolitan Avenue.....	92.0
† <i>Onderdonk Avenue</i> —Metropolitan Avenue to Catalpa Avenue.....	4.5
† <i>Weil Place</i> —Flushing Avenue to Washington Place	72.0
† <i>Cassel Avenue</i> —Washington Avenue to Jay Street	757.0
<i>Fiftieth Street</i> —Astoria Avenue to Polk Avenue.....	
<i>Fifty-first Street</i> —Flushing Bay to 100 ft. south of Polk Avenue; Corona Avenue to Queens Boulevard	
† <i>Lake Street</i> —Junction Avenue to Alburdis Avenue.....	31.8
† <i>Banta Street</i> —Van Dam Street to Junction Avenue.....	
† <i>Fourth Street</i> —Queens Boulevard to Jackson Avenue.....	
† <i>Fifth Street</i> —Queens Boulevard to Woodside Avenue.....	47.0
† <i>Sixth Street</i> —Stryker Avenue to Seventh Street	
† <i>Seventh Street</i> —Jackson Avenue to 150 ft. south of Stryker Avenue.....	
† <i>Eighth Street</i> —Woodside Avenue to Jackson Avenue.....	75.3
<i>Towns Place</i> —Packard Street to Laurel Hill Avenue.....	4.5
<i>Remington Street</i> —Beaufort Avenue to Chichester Avenue.....	4.8
† <i>Skillman Avenue</i> —Woodside Avenue to angle between Van Pelt and Hulst Streets	109.0
* <i>Central Avenue</i> —Myrtle to Edsall Avenues.....	207.0
* <i>Decatur Street</i> —Brooklyn Borough Line to Myrtle Avenue.....	56.0
* <i>Covert Street</i> —Brooklyn Borough Line to Wyckoff Avenue.....	
* <i>Schaeffer Street</i> —Brooklyn Borough Line to Wyckoff Avenue.....	
* <i>Cooper Street</i> —Brooklyn Borough Line to St. Felix Avenue.....	7.1
* <i>Cooper Place</i> —Wyckoff Avenue to Cypress Avenue.....	
* <i>Irving Avenue</i> —Brooklyn Borough Line to Moffat Street.....	
<i>Whitney Street</i> —Academy Street to Crescent.....	254.6
<i>Yellowstone Avenue</i> —Woodhaven Avenue to Queens Boulevard.....	23.2
<i>Ely Avenue</i> —Jackson Avenue to Nott Avenue.....	1,380.0
<i>East River Park</i> —Bounded by Ditmars Avenue, Barclay Street, Hoyt Avenue and East River.....	
<i>Gerry Avenue</i> —Pike Street to Marlowe Avenue.....	
<i>Pike Street</i> —Corona Avenue to Maurice Avenue.....	37.5
<i>South Villa Street</i> —Liberty Avenue to Jerome Avenue.....	9.1
* <i>Richard Avenue</i> —Myrtle Avenue to Otto Street.....	11.3
<i>Eliot Avenue</i> —Metropolitan Avenue to Mount Olivet Avenue, and Edith Place to Queens Boulevard.....	224.0
<i>Broad Street</i> —Maspeth Avenue to Borden Avenue.....	26.9
Total area of Benefit Maps completed.....	3,809.8

†Started last year, or earlier.

*Amended Maps.

BENEFIT MAPS—NOT COMPLETED.

	Acres
<i>Queens Boulevard</i> —Van Dam Street to Hillside Avenue.....	1,590.0
<i>Atlantic Avenue</i> —Brooklyn Borough Line to Van Wyck Avenue.....	212.0
<i>Corona Avenue</i> —Hampton Street to Rodman Street.....	240.4
<i>Kimball Avenue</i> —Liberty Avenue (near Digby Street) to Liberty Avenue (near Baker Street).....	197.0
<i>Rockaway Road</i> —Conduit to Hook Creek.....	799.0
<i>Calamus Avenue</i> —Maurice Avenue to Woodhaven Avenue.....	52.0
Total area of Benefit Maps not completed.....	3,090.4

PROFILE MAPS—FOR WHICH DETAIL GRADES WERE COMPUTED.

	Feet
<i>Bayreuth Street</i> —Parsons Avenue to Dutchess Street.....	2,530
<i>Riker Avenue</i> —Steinway Avenue to Twelfth Street.....	2,850
<i>Amity Street</i> —Wateredge Avenue to Main Street.....	2,375
<i>Marston Avenue</i> —Murray Street to Dunsing Street.....	855
<i>Dunsing Street</i> —Marston Avenue to Matthew Place.....	182
<i>Matthew Place</i> —Dunsing Street to Hoogland Street.....	1,040
<i>St. Felix Avenue</i> —Alden Avenue to Old Bergen Avenue.....	1,055
<i>Twelfth Street</i> —Fillmore Avenue to Bulkhead Line of East River.....	9,687
<i>Liberty Avenue</i> —Brooklyn Borough Line to Van Wyck Avenue.....	15,540
<i>Proctor Street</i> —Metropolitan Avenue to Myrtle Avenue.....	3,835
<i>McComb Place</i> —Edsall Avenue to Myrtle Avenue.....	1,550
<i>Kew Gardens Road</i> —Union Turnpike to Iris Place.....	2,500
<i>Ninth Street</i> —Jackson Avenue to Broadway.....	1,300
<i>Tenth Street</i> —Jackson Avenue to Broadway.....	1,520
<i>Peel Street</i> —Hayes Avenue to Broadway.....	1,050
<i>Gleane Street</i> —Baxter Avenue to Kingsland Avenue.....	2,850
<i>Hampton Street</i> —Baxter Avenue to Kingsland Avenue.....	2,640
<i>Fulton Street</i> —Fisk Avenue to Plover Place.....	2,400
<i>Ziegler Avenue</i> —Bayreuth Street to Willets Point Road.....	6,470
<i>Liberty Avenue</i> —South Villa Street to Van Wyck Avenue.....	2,500
<i>Mazeau Street</i> —Falkner Street to Metropolitan Avenue.....	6,850
<i>Radcliff Street</i> —Waldron Street to Hewitt Avenue.....	5,645
<i>Strong Street</i> —Waldron Street to Hewitt Avenue.....	5,780
<i>Burrough Avenue</i> —Borden Avenue to Woodside Avenue.....	5,730
<i>Schroeder Place</i> —Queens Boulevard to Woodside Avenue.....	1,112
Total	89,846

LEGAL STATUS CORPS.

REPORTS MADE.

Legal Opening	86
Legal Status, for Local Boards.....	683
Legal Status, for Corporation Counsel.....	165
Miscellaneous	310
Total	1,244
Physical Street Inspections.....	337

Several special maps were made.

Data relative to the legal status of streets, for use in reports, are constantly being collected and indexed. The old records of the Village of College Point and the City of Long Island City are being copied and indexed.

STREETS DEDICATED, ACCORDING TO OPINIONS RENDERED BY THE CORPORATION COUNSEL.

	Feet
<i>Alburtis Avenue</i> —Polk Avenue to Fillmore Avenue.....	490
<i>Atlantic Street</i> —Collins Avenue easterly 500 feet.....	500
<i>Beaufort Avenue</i> —Freedom Avenue to Seattle Street.....	750
<i>Bleeker Street</i> —Forest Avenue to Fresh Pond Road.....	1,350
<i>Bowne Avenue</i> —Jackson Avenue to Franklin Place.....	2,680
<i>Chaffee Street</i> —Catalpa Avenue to Cornelia Street.....	700
<i>Chestnut Street</i> —Jamaica Avenue to Atlantic Avenue.....	1,870
<i>Church Street</i> —Catherine Street to South Street.....	650
<i>Clark Street</i> —Van Alst Avenue to Main Street.....	530
<i>Clermont Avenue</i> —Grand Street to Maspeth Avenue.....	370
<i>Clifton Avenue</i> —Halle Avenue to Long Island Railroad.....	400
<i>Congress Avenue</i> —Laurel Hill Boulevard to Clifton Avenue.....	950
<i>Cooper Avenue</i> —Brooklyn Borough Line to Myrtle Avenue.....	7,700
<i>Crosby Avenue</i> —Vermont Avenue to about 100 feet south of Bulmer Place....	700
<i>Culver Place</i> —Hunt Place to Lake Street.....	340
<i>Debevoise Avenue</i> —Borden Avenue to Halle Avenue.....	1,560
<i>Dennison Street</i> —Atwater Street to Ziegler Avenue.....	1,000
<i>Depot Lane</i> —22nd Street to 26th Street.....	950
<i>Dill Place</i> —Myrtle Avenue to Cooper Avenue.....	1,450
<i>Downing Street</i> —Yarmouth Street westerly 200 feet.....	200
<i>Eagles Street</i> —Matthew Place to Jackson Avenue.....	440
<i>Eagles Street</i> —Fourteenth Street to Cryder's Lane.....	200
<i>Emerson Street</i> —Freedom Avenue to Bedford Avenue.....	1,970
<i>Ericson Street</i> —Grand Avenue to Schurz Avenue.....	470
<i>Falkner Street</i> —Fisk Avenue to Columbia Avenue.....	500
<i>Ferry Street</i> —Jamaica Avenue to Ashland Street.....	1,430
<i>Folsom Avenue</i> —Central Avenue to Myrtle Avenue.....	720
<i>Forest Parkway</i> —Jamaica Avenue to Ashland Street.....	1,350
<i>Franconia Avenue</i> —Jamaica Avenue to Parsons Avenue.....	1,770
<i>Franklin Avenue</i> —Hollis Avenue to Whittier Street.....	2,000
<i>Franklin Avenue</i> —Parsons Avenue to Sauli Street.....	3,250
<i>Fulton Place</i> —North Villa Street to Long Island Railroad.....	1,400
<i>Fulton Street</i> —Napier Avenue to about 200 feet west of Herald Avenue....	200
<i>Gamma Place</i> —Myrtle Avenue to Suburban Street.....	520
<i>Greenwood Avenue</i> —Jamaica Avenue to Kimball Avenue.....	4,780
<i>Grennell Street</i> —Matthew Place to Mitchell Avenue.....	2,150
<i>Grout Avenue</i> —Betts Avenue to Schroeder Place.....	750
<i>Hatch Avenue</i> —Atlantic Avenue to Ridgewood Avenue.....	1,100
<i>Haydock Street</i> —California Avenue to Lucerne Place.....	920
<i>Herald Avenue</i> —Jamaica Avenue to Atlantic Avenue.....	1,550
<i>Hobson Avenue</i> —Laurel Hill Boulevard to Long Island Railroad.....	2,500
<i>Hollis Avenue</i> —Farmers Avenue to Springfield Road.....	9,600
<i>Hull Avenue</i> —Old Brooks School Road to Willow Avenue.....	1,800
<i>Hunt Place</i> —Culver Place to Alburtis Avenue.....	400
<i>Inkerman Street</i> —Mitchell Avenue to 630 feet south of State Street.....	1,530
<i>Ithaca Street</i> —Baxter Avenue to Kingsland Avenue.....	2,400
<i>James Street</i> —Broad Street to Flushing Avenue.....	200
<i>John Street</i> —Metropolitan Avenue to Bleeker Street.....	620
<i>Jonathan Street</i> —Fifth Avenue to Fourteenth Avenue.....	3,600
<i>Jones Avenue</i> —Laurel Hill Boulevard to about 225 feet east of Clifton Avenue	1,420
<i>Judge Street</i> —Elmhurst Avenue to Britton Avenue.....	570

	Feet.
<i>Junction Avenue</i> —Jackson Avenue to Hunt Street; Altsyne Avenue to Corona Avenue, and Maurice Avenue to Justice Street.....	5,800
<i>Justice Street</i> —Broadway to Junction Avenue.....	3,300
<i>Kendall Street</i> —Crocheron Avenue to about 730 feet north of State Street...	1,730
<i>Laurel Hill Avenue</i> —Borden Avenue to Old Celtic Avenue.....	650
<i>Laurel Hill Boulevard</i> —Newtown Creek to Fifth Street.....	7,350
<i>Little Bayside Road</i> —Whitestone Road to Bell Avenue.....	5,700
<i>Lott Avenue</i> —Jamaica Avenue to Rockaway Boulevard.....	2,100
<i>McPherson Street</i> —Catalpa Avenue to Cornelia Street.....	700
<i>Manor Avenue</i> —Jamaica Avenue to Ridgewood Avenue.....	890
<i>Maple Street</i> —Herald Avenue to Freedom Avenue.....	1,200
<i>Maure Avenue</i> —Wisner Place to Metropolitan Avenue.....	2,100
<i>Millard Street</i> —Jackson Avenue to Station Road; Depot Lane to State Street northerly about 680 feet.....	2,380
<i>Mitchell Avenue</i> —Dunsing Street to Joslin Street.....	1,470
<i>Montford Street</i> —Richford Street to Benson Place.....	2,800
<i>New York Avenue</i> —Fulton Street to South Street.....	2,000
<i>North Cochran Street</i> —Jamaica Avenue to Ridgewood Avenue.....	760
<i>North Curtis Avenue</i> —Jamaica Avenue to Ridgewood Avenue.....	780
<i>North Henry Street</i> —Flushing Avenue to Newtown Avenue.....	600
<i>North Villa Street</i> —Metropolitan Avenue to Ridgewood Avenue.....	1,850
<i>Norwood Place</i> —Jackson Avenue to Station Road, and Depot Lane to State Street	1,800
<i>Nott Avenue</i> —Vernon Avenue to Jackson Avenue.....	2,600
<i>Ormond Street</i> —Queens Avenue to Station Road, and Crocheron Avenue to State Street	3,450
<i>Palatina Avenue</i> —Hillside Avenue to Palo Alto Avenue.....	400
<i>Pinford Place</i> —Station Road to Queens Avenue.....	2,700
<i>Quaker Place</i> —Station Road to Queens Avenue.....	2,600
<i>Queens Road</i> —Cemetery Lane to Rocky Hill Road.....	1,800
<i>Rector Street</i> —Jamaica Avenue to Rockaway Plank Road.....	2,200
<i>Ridgewood Avenue</i> —Maure Avenue to North Curtis Avenue.....	1,200
<i>Rockaway Road</i> —Locust Avenue to Farmers Avenue.....	5,700
<i>Rowan Avenue</i> —Laurel Hill Avenue to about 130 feet north of Maurice Avenue	1,600
<i>St. Felix Avenue</i> —Walter Street to about 220 feet south of Seneca Avenue...	550
<i>Scott Street</i> —Chestnut Street to Stoothoff Avenue.....	450
<i>Sedgwick Street</i> —Catalpa Avenue to Cornelia Street.....	700
<i>Silkworth Avenue</i> —Jamaica Avenue to about 450 feet south of Ridgewood Avenue	1,150
<i>Skillman Avenue</i> —Harold Avenue to about 75 feet west of Van Pelt Street..	320
<i>Stanhope Street</i> —Woodward Avenue to Fairview Avenue.....	440
<i>Sycamore Place</i> —Maure Avenue to L. I. R. R.....	340
<i>Tower Place</i> —Freedom Avenue easterly about 460 feet.....	460
<i>Townsend Avenue</i> —Laurel Hill Boulevard to about 330 feet east of Clifton Avenue	1,370
<i>Union Street</i> —Jackson Avenue to Franklin Place.....	3,020
<i>Vanderveer Avenue</i> —Jamaica Avenue to Fulton Street.....	1,450
<i>Walker Avenue</i> —Jamaica Avenue to Ridgewood Avenue.....	890
<i>Waverly Place</i> —Jamaica Avenue to Metropolitan Avenue.....	1,280
<i>Wertland Avenue</i> —Hempstead and Jamaica Plank Road to Whittier Street..	850
<i>Whitestone Avenue</i> —Jackson Avenue to Gower Avenue.....	8,500
<i>Wisner Place</i> —North Wickes Street to Atfield Place.....	900

	Feet.
<i>Woodhaven Avenue</i> —Atlantic Avenue to Brooklyn Water Conduit.....	7,050
<i>Woodward Avenue</i> —Flushing Avenue to Lutheran Cemetery Branch, Brooklyn Rapid Transit	5,000
<i>Yaphank Street</i> —Yarmouth Street westerly about 215 feet.....	210
<i>Eighth Avenue</i> —18th Street to 26th Street.....	2,800
<i>Second Street</i> —Jackson Avenue to Burnside Avenue.....	690
<i>Fourth Street</i> —Lawrence Boulevard to L. I. R. R.....	500
<i>36th Street</i> —11th Avenue to 26th Street.....	1,200
<i>40th Street</i> —Burns Avenue to Hayes Avenue, and Fillmore Avenue to Forest Street	3,200
<i>47th Street</i> —Astoria Avenue to Hayes Avenue.....	1,950
<i>48th Street</i> —Astoria Avenue to Polk Avenue.....	2,550
<i>49th Street</i> —Burnside Avenue to Polk Avenue.....	2,100
<i>Beach 59th Street</i> —Long Island Railroad to the Atlantic Ocean.....	1,300
<i>Beach 63rd Street</i> —Larkin Street to the Atlantic Ocean.....	900
<i>Beach 64th Street</i> —Larking Street to the Atlantic Ocean.....	900
<i>Beach 65th Street</i> —Long Island Railroad to Atlantic Ocean.....	1,350
<i>Beach 67th Street</i> —Long Island Railroad to Atlantic Ocean.....	1,350
<i>Beach 71st Street</i> —Amstel Boulevard to Atlantic Ocean.....	2,160
<i>Beach 75th Street</i> —Far Rockaway Boulevard to Atlantic Ocean.....	1,600
<i>Beach 79th Street</i> —Rockaway Beach Boulevard to Atlantic Ocean.....	900
<i>Beach 80th Street</i> —Rockaway Beach Boulevard to Atlantic Ocean.....	900
<i>Beach 81st Street</i> —Finnard Street to Atlantic Ocean.....	1,900
<i>Beach 82nd Street</i> —Long Island Railroad to Atlantic Ocean.....	2,050
<i>Beach 84th Street</i> —Long Island Railroad to Atlantic Ocean.....	1,900
<i>Beach 85th Street</i> —Beach Channel Drive to Atlantic Ocean.....	2,450
<i>Beach 86th Street</i> —Jamaica Bay to Atlantic Ocean.....	2,450
<i>Avenue "D"</i> —College Avenue to 13th Street.....	300
Total linear feet of street dedications.....	221,140

MISCELLANEOUS.

MAPS FILED WITH THIS BUREAU.

Final Sections	6
Alterations	57
Draft Damage (original).....	37
Draft Damage (tracing).....	37
Profile	35
Guarantee	547
Sales	31
Sewer District	7
Tax	160
Railroad	1
Miscellaneous	12

MAPS DISTRIBUTED BY THIS BUREAU.

For official use.....	1,320
Sold to the public.....	320

COPIED AT THE COUNTY CLERK'S.

Sales Maps	1,212 acres
Guaranteed surveys	1,500 acres
Deed descriptions	480 acres

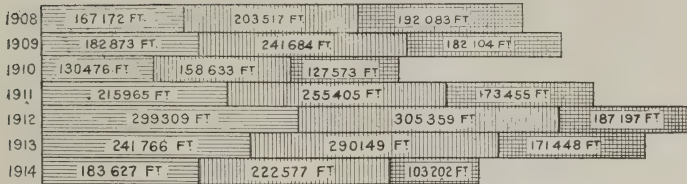
Designed to serve our special needs, thereby saving time and cost of searches, we have started a small title plant of our own at the County Clerk's Office, which now contains about 1,325 names, covering individuals, families, grantors, grantees and wills.

BLUE PRINTS MADE BY THIS BUREAU.

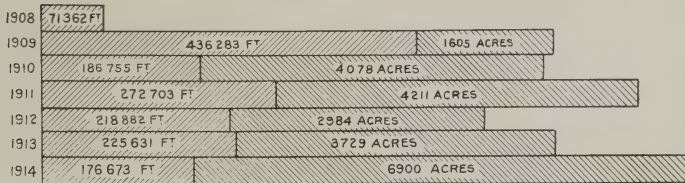
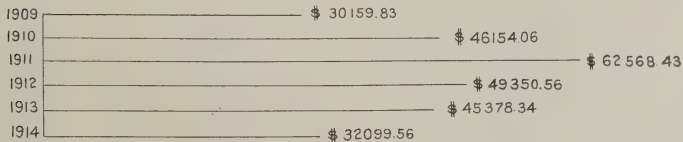
For this bureau and other City departments.....	2,460
For the Long Island Railroad.....	49
For the Title Guarantee and Trust Company.....	130
For the United States Title Guaranty Company.....	11
For the Lawyers' Title Insurance and Trust Company.....	91
Total.....	2,741

NOTE.—This total would be about 3,300, if credit were taken for each unit of sectional maps and plans printed.

PROGRESS CHART OF STREET OPENING MAPS



RULE, DRAFT DAMAGE, AND PROFILE MAPS



FINAL DAMAGE AND FINAL BENEFIT MAPS

RULE MAPS SHOWN THUS



DRAFT DAMAGE MAPS SHOWN THUS



PROFILE MAPS SHOWN THUS



FINAL DAMAGE MAPS SHOWN THUS



" BENEFIT " " " "

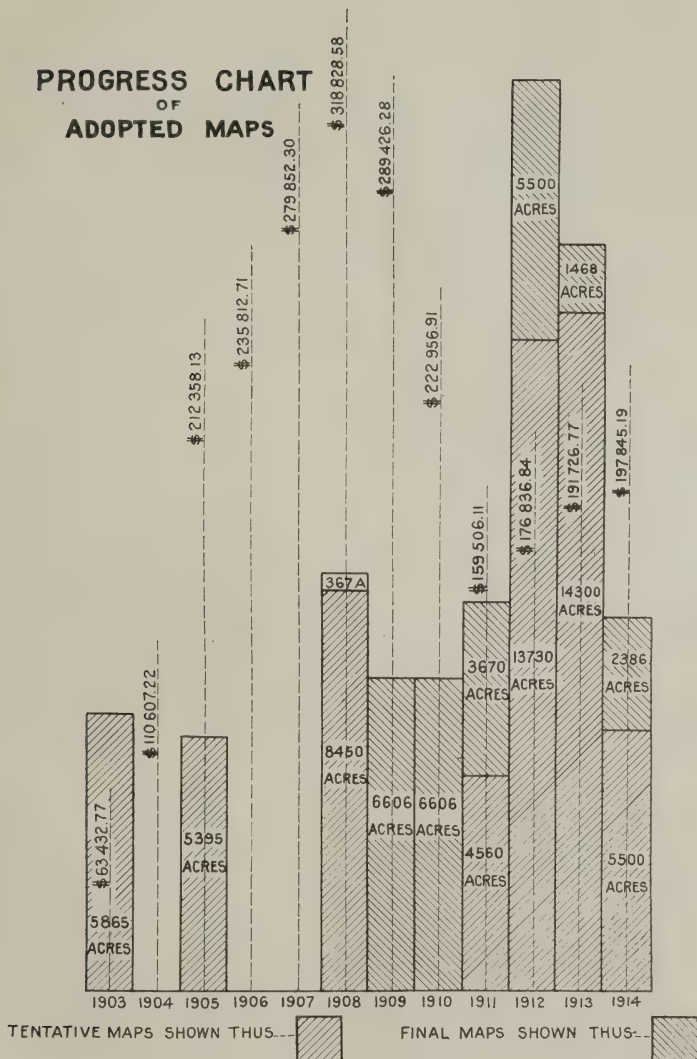


NOTE: Previous to 1903 the cost of Street Opening Maps was paid from Budget Appropriations or from Corporate Stock.

YEAR	TENTATIVE MAPS ADOPTED		FINAL SECTIONS ADOPTED		STREET OPENING MAPS											
	N ^o	AREA IN ACRES	N ^o	AREA IN ACRES	RULE		DRAFT DAMAGE		PROFILES		FINAL DAMAGE		FINAL BENEFIT			
					N ^o	LENGTH IN FEET	N ^o	LENGTH IN FEET	N ^o	LENGTH IN FEET	N ^o	LENGTH IN FEET	N ^o	LENGTH IN FEET	N ^o	AREA IN ACRES
1908	1	84.50	1	367	54	167 172	74	203 517	66	192 083	33	71 362	26			
1909			18	6606	69	182 873	66	241 684	49	182 104	27	436 283	25	1605		
1910			18	6606	40	130 476	45	158 633	36	127 573	52	186 755	57	4078		
1911	1	4560	10	3670	59	215 965	71	255 405	48	173 455	70	272 703	72	42 11		
1912	4	13 730	15	5500	69	299 309	82	305 359	52	187 197	70	218 882	52	2984		
1913	2	14 300	4	1468	70	241 766	80	290 149	61	171 448	71	225 631	59	3729		
1914	2	5500	8	2386	42	183 627	51	222 577	35	103 202	51	176 673	52	6900		

ALTERATION MAPS AND SPECIAL MAPS				MONUMENTS		FIELD WORK				LEGAL STATUS		EXPENDITURES	
YEAR	TRANSMITTED FOR ADOPT. FOR FILING		RE-SET	SET	RE-SET	BUILDINGS LOCATED	FEET OF MEASUREMENTS		ANGLES TURNED	FEET OF STREET LEVELS		BUDGET AND CORPORATE STOCK	STREET AND PARK OPENING FUND
1908	17	9	1123	334	7048	8646 595	127 14	277 949				318 828.58	
1909	25	17	832	466	6161	8070 960	97 19	852 187	196			289 426.28	30159.83
1910	25	18	570	634	3215	7722 357	99 62	17 53 372	312			222 956.91	46154.06
1911	71	30	354	253	3114	6150 387	10 121	275 734	960			159 506.11	62 568.43
1912	68	41	586	131	4399	7113 234	14 736	985 004	1037			176 836.84	49 350.56
1913	90	54	604	185	3326	6085 248	11 554	158 531	1224			191 726.77	45 378.34
1914	75	51	783	139	1446	6762 076	12 404	446 040	1244			197 845.19	32 099.56

PROGRESS CHART OF ADOPTED MAPS



NOTE: Broken lines includes cost of Street Opening Maps, which, previous to 1909, was paid from Budget Appropriations or from Corporate Stock

REPORT OF THE BUREAU OF SUBSTRUCTURES AND FRANCHISES.

DUTIES OF THE BUREAU.

Accumulating all available data by surveys and by locations taken when openings are made in the streets for new installations or repairs to existing substructures.

Assigning locations for the installation of new substructures with the object of conserving subsurface space for future utilization, thereby reducing pavement mutilation to a minimum.

Furnishing to applicants for subsurface space for tunnels, pipe lines, conduits, etc. (where the Bureau has obtained sufficient data), information as to location and size of existing substructures. This information is required by the Board of Estimate and Apportionment when applications are filed for franchises.

Furnishing other City Departments with information for use in construction of new installations.

Compiling Boring Data throughout the Borough.

Compiling Franchise Data.

VALUE OF WORK.

The value of the work of this Bureau may be outlined as follows:

The ultimate object of this Bureau is not only locating and mapping substructures but the utilization of these records for economical assigning of locations for new installations, thereby conserving for future disposition valuable subsurface space, which will prove one of the City's most valuable assets.

The assignment of this space to applicants giving a comparatively unobstructed route is of great value, and this Bureau in time proposes to exact a moderate fee for such information, as is done in other cities.

When sufficient data has been obtained it will be of great value preliminary to the construction of public works, and could be made a part of the contract drawings. This would give the contractor much valuable information of the character of the substructures to be cared for during construction. This will unquestionably result in a material saving in the price of the work.

The systematic method now in use for permanently recording boring data throughout the borough will, in a short time, mean the saving of thousands of dollars for borings, which would be necessary without this data now being compiled.

METHOD OF PROCEDURE.

To facilitate the execution of the work in this large Borough and avoid possible repetitions, it was necessary to subdivide the Borough into sections, and each section has been subdivided into divisions, the exact size of the record maps. Long Island City is the territory in which our surveys and maps have been made. This area has been laid out in two sections called Sections Nos. 1 and 2, based on the system of co-ordinates used by the Topographical Bureau. The sheets or record maps in Sections Nos. 1 and 2 cover an area of 600 ft. by 800 ft., and are plotted to a scale of 20 ft. to the inch. There are 225 Record Maps in Section No. 1, and 205 in Section No. 2, each Record Map being numbered in its respective section.

The remainder of the Borough is laid out in sections to correspond with the final section maps of the Topographical Bureau. To do this the size of area covered by each Record Map will be changed to 500 ft. by 800 ft. making 40 Record Maps to each final section, numbered from 1 to 40.

Owing to the changes and additional installations that are continually being made from time to time, the Record Maps are never completed, but must be kept up to date.

Data has been obtained from the various Public Service Corporations and City

Departments; in fact every available source of information is being investigated. In many instances this data is incomplete and not accurate, but it is all plotted as temporary record until it can be replaced by actual surveys in the field, when the streets are opened during construction of new installations. The progress of accurate mapping of this data depends on the number of openings made in the streets for subsurface construction.

Notice of every permit granted for subsurface work in the Borough is sent to this office, which are investigated and the installations located.

Owing to the small force employed in this Bureau, it has been found impossible to cover all of the Borough, and the First Ward is the only section in which this has been completely carried out, but the location of many extensive installations throughout the Borough have been made.

The work of obtaining and classifying the Franchise records of all Public Service Corporations pertaining to this Borough is well under way. A large graphical index map has been prepared showing by colors the nature and extent of each Franchise grant. Considerable difficulty has been encountered in obtaining copies of the franchises of several Corporations, but I hope that this delay will be of short duration.

Through the co-operation of the Building Department, we are receiving records of all plans filed for the construction of new buildings that show subsurface encroachments. These records are properly indexed and filed.

Preliminary to preparing the record maps, a detailed topographical survey is made over the area covered. This survey includes the location of building lines, car tracks, all poles, hydrants, elevated columns, manhole covers, gas drips, and in fact any object on the surface of the streets that will serve as a guide for determining the location of substructures.

Upon the completion of the detailed Topographical Survey, the subsurface location survey, or detail box measurement work is taken up. Each manhole, conduit box, water gate box, etc., is opened and measured in detail as to the location of the pipe or duct line passing through it.

Surveys covering 20 record maps in Section No. 1, Long Island City, have been completed in the field. Twelve of these are plotted.

Corrections and additions have been located and shown on the Record Maps.

All available Boring Data has been graphically indexed and filed.

All subsurface data located from street openings in Long Island City has been plotted on the color index map.

A special map and statistics were prepared for exhibition at the Panama-Pacific Exposition.

When the record maps are plotted in detail, colors are used to distinguish the various features that have been accurately located, and the portions that have been plotted from other than field locations are shown in pencil until a field location is obtained, at which time they are colored.

All Sewer Department data over area surveyed was copied and properly incorporated in our records.

All available City Department data and Company information was obtained and utilized in the area surveyed.

Templets of each Record Map surveyed were made to a scale of 80 feet to the inch, and sent to the Public Service Corporations for use in submitting data.

SUMMARY OF WORK DONE BY FIELD FORCE FOR THE YEAR ENDING DECEMBER 31, 1914.

No. of Angles Turned	39
No. of Features Located	2,089
No. of Feet of Traverse	56,100
No. of Feet of Curbs Located	68,230
No. of Feet of Trolley Tracks Located.....	24,140
No. of Feet of Taping	165,760

No. of Feet of Building Line Located.....	70,020
No. of Sewer Manholes Located.....	334
No. of Sewer Catch Basins Located.....	98
No. of Telephone Co. Boxes Located.....	34
No. of Gas Boxes Located.....	442
No. of Water Boxes Located.....	264
No. of Power Co. Boxes Located.....	9
No. of Street Railway Boxes Located.....	29
No. of Miscellaneous Boxes Located.....	24
No. of Poles, Etc., on Sidewalks Located.....	816
No. of Street Openings Located.....	1,348
No. of Feet of Subsurface Work Located.....	174,942
No. of Feet of Gas Mains Located.....	65,199
No. of Feet of Water Mains Located.....	72,173
No. of Feet of Sewer Pipe Located.....	1,023
No. of Feet of Power Duct Located.....	165
No. of Feet of Telephone Located.....	29,300
No. of Feet of Miscellaneous Pipe Located.....	10
No. of Boxes, Catch Basins, Etc., Measured in Detail.....	628
No. of Openings, Located by Levels.....	28
No. of Feet of Levels Located.....	3,800
No. of Feet of Tunnels Located.....	1,100

The area surveyed covers 8.8 miles of streets.

Owing to the extensive sewer construction in the Second, Third, and Fourth Wards, as well as other subsurface installations, which are constantly being made throughout the entire Borough, and as the only opportunity of obtaining accurate location is when the work is being done, I would strongly recommend that the force of the Bureau be increased in order to meet the requirements of this work.

To permit this vast amount of installations to be covered up without being located would mean the loss of accurate information that is invaluable to this Bureau, and which could never be fully replaced after its installation. It would, therefore, be highly advisable, at the proper time, to endeavor to show the necessity for an additional appropriation and urge the authorities to grant this request, in order that the force of the Bureau may be increased sufficiently to properly carry on this work.

**BUREAU OF PUBLIC BUILDINGS
AND OFFICES**

REPORT OF THE BUREAU OF PUBLIC BUILDINGS AND OFFICES FOR
THE YEAR ENDING DECEMBER 31, 1914.

BUILDINGS UNDER THE SUPERVISION OF THE BUREAU AND FORCE EMPLOYED.

Queens County Court House.—Court Square, Long Island City. Occupied by Supreme Courts Parts One and Two, County Courts, Special Term, Court Clerk's Offices, Judges' Chambers, District Attorney's Offices, Sheriff's Office, County Clerk's Branch Office, Grand Jury, Commissioner of Jurors, Deputy City Clerk, Law Library, Grand Army and Janitor's Apartments. Two elevators, seven public toilets, nine private toilets, twenty-six large rooms, forty small rooms and seven hallways.

Force employed, seventeen men, eight women. Floor space, 92,000 sq. ft.

Borough Hall.—Fifth Street, Long Island City. Leased. Occupied by the Borough President's Offices, Commissioner and Assistant Commissioner of Public Works, Secretaries of the Borough and to the President, Consulting Engineer, Appointment Clerk, Purchasing Division, Contract Division, Division of Audit and Accounts, Payroll Division, Bureaus of Highways, Sewers, Street Cleaning and Buildings, Testing Laboratory, License Bureau and Local Board Rooms.

Force employed, eight men, six women. Floor space, 34,110 sq. ft.

St. Mary's Lyceum Building.—Long Island City. Leased. Occupied by the Magistrates' and Municipal Courts.

Force employed, 2 men. Floor space, 6,617 sq. ft.

Interior Bath.—Eighth Street, Long Island City. Owned by City.

Force employed, 5 men, 2 women. Floor space, 4,085 sq. ft.

Town Hall, Newtown.—Owned by City. Occupied by Municipal Court, Clerk's Office, Local offices of the Bureaus of Highways and Street Cleaning and Police Departments.

Force employed, 1 man, 1 woman. Floor space, 11,300 sq. ft.

Town Hall, Flushing.—Owned by City. Occupied by Magistrate's Court, Clerk's Offices, Offices and Store Rooms of the Bureau of Public Buildings and Offices, Local Offices of the Bureau of Highways, Street Cleaning, Water Department, Sewer Department and Park Department, and Janitor's Apartments.

Force employed, 4 men, 1 woman. Floor space, 23,175 feet.

Town Hall, Jamaica.—Owned by City. Occupied by Court of Special Sessions, Magistrate's and Municipal Courts, Coroners' Courts and Offices, Judge's Chamber, Sealer of Weights and Measures, Telegraph Office of the Fire Department, Spanish-American War Veterans and Police Department.

Force employed, 3 men, 1 woman. Floor space, 42,855 sq. ft.

Public Comfort Station.—Adjoining the Town Hall, Jamaica. Owned by City. For use of male and female. Force employed, 1 man and 1 woman.

County Building, Jamaica.—Owned by City. In course of reconstruction. Occupied by Queens County Clerk's Office and Surrogate's Court and Offices. Janitor's house in rear.

Force employed, 4 men, 2 women. Floor space, approximately 40,000 sq. ft.

Magistrate's Court Building, Far Rockaway.—Owned by City. Occupied by Magistrate's Court and Clerk's Offices.

Force employed, 1 man. Floor space, 4,929 sq. ft.

Following is a statement of the principal work performed during the year:

QUEENS COUNTY COURT HOUSE.

Carpentry.—Oak partitions were erected on the first floor front, to form Offices for use of the County Clerk, oak panels were put in several doors to replace glass, which was continually being broken, built shelves for telephones, put on weather strips, removed storm stairs in the spring, repaired and replaced same in the

fall, altered partitions, repaired window frames, repaired and regulated door checks, placed new sash cord in windows, built shelving in vaults for storage of books and papers. Prepared detail plans for new storm sash, repaired locks, furniture and repaired generally throughout building.

Plumbing.—The closets, urinals and basin waste have been cleaned, urinal and basin tanks and faucets repaired, thawed water pipes and put in new valves, repaired valves in engine room, repaired urinal and closet flushometers and kept same in order. Inspected and oiled all flushometers weekly, and made all small repairs when necessary.

Steam Fitting.—Put in new check valve at tank of fire line and made all necessary changes as required by the Fire Department of the City of New York, re-seated and put in new discs on main stop valves of boiler and packed stems of same, repaired reducing valve on steam line of heating system, and checks on returns to radiators. Repaired automatic damper regulator and piping to same, replaced radiator valves that had been repaired in shop in place of those that were out of order throughout building. Repaired valves in Paul vacuum system that were not working properly, repaired and ground seat of safety valves on boilers, put new diaphragms in steam reducing valves, repaired boiler feed pumps on water end, put new valves in exhaust of same, laid new boiler blowoff from boiler to sewer, repaired radiators throughout building. Repaired feed water pipe, steam trap, and valves on trap. Repaired leaks in valves and steam lines leading to jail, and made general repairs as required.

Tinsmithing and Sheet Metal Work.—Repaired galvanized iron ornamental work on roof, repaired galvanized iron leaders on roof, made galvanized iron drip pans for elevators, repaired leaks in roof, made copper strainers for urinals, removed old sheet metal from floor of boiler room and replaced same with new metal, repaired gutters and leaders. Made in shop 5 iron tanks, 58 gal., with brass faucets to hold liquid soap disinfectants, etc., large galvanized iron tank and galvanized iron pans for use in the Laboratory at Borough Hall, iron leaders for use on buildings, notched and edged tin for use in buildings, made protectors for electric switches. Repaired ash cans, iron buckets, cuspidor cups, snow shovels, wrought iron handles, letter boxes, etc.

Electrical Work.—Wired and installed four portable fixtures, new receptacle plug and buzzer, in Supreme Court, Part I. Recharged batteries for elevator bells, installed new switch in basement, new porcelain sockets in area fixtures, and new fixtures in area vault, repaired motors, panel-boards, cutouts, controllers and ventilating system, installed new light fixtures, conduits and lights in elevator machine room. Installed new wiring in County Court and Ladies' Rooms, new switch in Engineer's toilet, new insulating plates in public elevator controller. Recharged batteries, repaired bell and all electrical machinery. Installed new light outlets and fixtures in Deputy City Clerk's Office, recharged thirteen cells of batteries, renewed two desk fixtures in County Court Room, repaired electric carpet sweepers, cleaned switchboard generally, cleaning and polishing contacts on elevator controller and made minor repairs.

Painting.—Prepared and varnished floor in City Clerk's Office, filled, varnished and finished new oak panels in sash doors throughout building where glass was removed, painted electric tubing in basement, painted and stippled windows in civil prison. Painted fountain, iron fence and cement work in plaza in front of Court House, filled, stained and varnish finished twenty feet of hard oak partition in the Deputy City Clerk's office, filled, stained and varnish finished panels in Sheriff's Office, scraped and painted three coats all sheet iron work on dome, cornice, gutters, flanges, leaders and skylight, on roof. Cut out cracks in ceilings and side walls plastered, sized and painted four coats, the Grand Jury, Trial Jurors and Court Clerk's rooms, finished seven radiators in above rooms with aluminum, varnish finished one oak panel, desks, chairs, etc., in the District Attorney's Office, lettered

in gold names on glass panels of doors in Deputy City Clerk's and County Clerk's Offices, cleaned and prepared ceilings and side walls in first, second and third floor halls, Administration building, and painted same with three coats of paint, dado and striped on walls of stairway. Scraped and aluminum painted the wire work around elevator shafts and iron risers on stairways, glazed where necessary and puttied and painted sash, cleaned and varnished safes, cabinets and other furniture.

Premises.—The grounds surrounding the building and the plaza in front of same have been attractively maintained throughout the summer months with flowers, shrubbery and well kept lawns.

BOROUGH HALL.

Carpentry.—Built new, altered and reset oak partitions forming offices for the President of the Borough and Bureaus under his jurisdiction, put down new flooring, repaired doors and windows, placed new sash cord in windows, made general repairs to furniture and throughout the building.

Plumbing.—Cleaned closet, urinal and basin wastes, repaired urinal and closet tanks and faucets. Took out fixtures and plugged openings for same in Laboratory. Put in new waste, basin and water supply lines in Engineer's Department, made general repairs to all plumbing as required.

Steam Fitting.—Repaired radiators that were leaking and out of order, radiator valves, and packed stems of same. Disconnected radiators and plugged risers, replaced same where required, repaired automatic air valves, repaired and cleaned out water column on both boilers, also blow-off valves. Installed two new radiators in local board room, installed new radiator with risers and all connections on second floor, repaired main stop valve on both boilers. Repaired blow-off valves, covered all new piping with asbestos covering. Made all necessary repairs in building.

Tinsmithing and Sheet Metal Work.—Took up sheet metal from floor, cleaned and replaced pipes leading from boilers to chimney, made extra heavy galvanized iron buckets and drip pans, repaired ash cans, cleaned flues, repaired roof and flashing around flag pole, made brass springs for use in the blue print room. Altered copper boiler, soldered utensils, etc.

Electrical Work.—Permanently connected motor and electric ovens in Laboratory, finished tabulating motor equipment in tabulating room, installed new light outlets and equipment in tabulating room and office of Division of Audit and Accounts, installed new electrical equipment in Laboratory, installed temporary lighting fixtures in Post Office Building, removed and re-installed telephone wires in Office of Bureau of Sewers, Bell system installed in office of Purchasing Agent, Appointment Clerk, President's private office and office of Contract Clerk. Installed new conduit, wiring, fixtures and equipment for actinic rays for asphalt testing machine. Rearranged wiring for addressograph machines, installed lighting fixtures for same in basement, repaired, cleaned and oiled forty fan motors, installed wiring, buzzers and button connections in Offices of Commissioner of Public Works, Mailing and Payroll Divisions, installed new metal moulding, wiring, switch and receptacle plugs for fan motor outlets on third floor, removed old telephone lines from top of partitions and replaced same to meet new connections, installed new light fixtures in Statistical Division, removed and reinstalled mouldings, wiring and fixtures in new locations in the Bureau of Sewers and storerooms in basement. Installed new reversing switch and cabinet for testing machine motor, cleaned panel and switchboards, made all general repairs to lighting and Bell system.

Painting.—New hard wood floors in two rooms were filled with wood filler, sand papered and finished with two coats of shellac and one coat of hard oil finish. Partitions cleaned and varnished and parts of the Laboratory painted. All panel boxes and electric tubing in building painted, five office partitions painted, grained and varnished. Side walls in one office painted, glass panels in office doors lettered, windows in office of Bureau of Street Cleaning painted and stippled. All radiators

finished in aluminum. Two hundred and twenty feet of new partition painted, grained and varnished. Private office of the President grained and varnished, stained and varnished telephone booth in same. Painted and lettered bulletin board and two signs for Local Board room, puttied and painted sash on first and second floor, windows glazed as required. Lettering removed from three doors and re-lettered with gold and varnished. Storage closet in office of Bureau of Buildings grained and varnished. Desk, chairs and other furniture cleaned and varnished.

ST. MARY'S LYCEUM.

Magistrate's and Municipal Courts.

Carpentry.—Removed Judges' desks, platform railings, etc., from one location to another in the Court Room where repairs were made, floors and other woodwork repaired where necessary. Repairs were made to stairways and all cutting and carpenter work done for plumber to install new toilets. Benches, desks and chairs repaired and general repairs have been made as required throughout building.

Plumbing.—Installed new toilet room, consisting of closet and basin waste and water supply connections, new soil and vent pipes, from cellar to third floor.

Steamfitting.—Repaired leak in water column and placed new water gauge on same, repaired radiator on second floor, also repaired leaks in steam line between first and second floor. Removed one radiator to different location and run new connections for same, packed and repaired radiator valves and connections.

Tinsmithing and Sheet Metal Work.—Made and put up galvanized iron risers on stair casings, repaired ash cans, shovels, etc.

Electrical Work.—Removed conduit, wires and fixtures, and reinstalled same in a different location in the Court Room due to change of location of Judges' bench, rearranged fixtures in prisoners' pen. Installed fan motor in Clerk's Offices, repaired lighting circuit and fixtures, arranged temporary lights for the use of plumber and carpenter.

Painting.—The ceilings, side walls and wood work of the First District Court Room, Judges' Room, Clerk's Room and Complaint Clerk's Room, were painted and radiators finished with aluminum, prisoner's pen, toilet rooms, upper and lower hallways of this building were also painted, the Judges' Bench, Clerk's desk, two large cabinets and tables were also cleaned and varnished. All settees in Court Room cleaned and varnished. Finished ceiling under stairway and the side walls in basement with Muresco.

INTERIOR BATH.

Carpentry.—Doors, windows, casings and other woodwork repaired, new bolts put on bathroom doors, bathroom door hinges renewed and repaired.

Plumbing.—Cleaned floor drains, shower heads, faucets, closet tanks and waste tanks and pipes. Overhauled and repaired shower valves, took down marble slabs, and repaired checks of shower valves behind same and reset slabs. Renewed washers on valves, etc., from time to time as required.

Steamfitting.—Connected up new steam gauge and new hot water thermometer, repaired damper regulator, also radiator and air valves, repaired main hot water valve leading to bath, repaired leaks in nipples in both manifolds of hot water boiler, also pressure gauge in same. Repaired and packed radiator valves, repaired leak in hot water boiler and water column and packed valves on hot water line.

Tinsmithing and Sheet Metal Work.—Put stopper in boiler pipes, made and placed supports for boiler pipes and wired all connections, fitted copper saddles on doors, covered boiler pipes with asbestos, repaired skylights and leaders.

Electrical Work.—Repaired ventilating equipment and lighting fixtures, cleaned panel and switchboard, renewed fixtures in basement, renewed burned out lamps.

Painting.—The entire interior of building painted with four coats of paint, all hard wood cleaned and varnished, iron work painted with black asphaltum, radiators finished with aluminum and ceilings in basement finished with Muresco.

TOWN HALL, NEWTOWN.

Carpentry.—Built partitions in toilets, repaired cellar windows, put new sash cord in windows, built and put up two bulletin boards and made general repairs as required throughout building.

Plumbing.—Cleaned closets and soil pipes, thawed and repaired water pipes, renewed valve washers and made such other minor repairs as were necessary.

Steamfitting.—Repaired water column and safety valve, main stem and blow-off valve, packed and repaired all leaky radiators. Installed new radiator in Chief Clerk's Office, covered all steam pipes with asbestos covering and repaired damper regulator.

Tinsmithing and Sheet Metal Work.—Removed, cleaned flues and replaced boiler pipes, repaired leaders, ash cans and other utensils.

Electrical Work.—Recharged batteries and repaired equipment.

Painting.—Washed and scraped ceilings and side walls, cut out and filled cracks and prepared walls for painting, painted with three coats of paint, cleaned and varnished woodwork. All glazing done where required and the exterior of sash repainted and repainted.

TOWN HALL, FLUSHING.

Carpentry.—Eased doors, put in sash cord, repaired locks, repaired furniture, and made general repairs as required.

Plumbing.—Repaired urinal tanks and faucets, cleaned closet and basin wastes, disconnected and repaired water meter, reset same and generally repaired plumbing in building.

Steam Fitting.—Repaired leaks in section of boiler, repaired all valves and connections of same, repaired damper regulator and all radiators throughout building.

Tinsmithing and Sheet Metal Work.—Made temporary repairs to roof and valleys. Made and installed galvanized iron pipe connection with boiler and chimney, put up sheet metal on cellar ceiling over boiler, pointed up boiler with asbestos cement, repaired and put up leaders, repaired ash cans, etc.

Electrical Work.—Installed light outlet in Janitor's locker, repaired lighting circuits in Office of Public Buildings, Magistrate's Court Room, Judge's room and hallway. Installed metal mouldings, wiring and switch for porch light. Repaired fixtures in boiler room, renewed lamps, cleaned panels and switchboard.

Painting.—Washed and scraped off old Muresco from ceilings and side walls of six rooms and hallways of Janitor's apartments, painted same with three coats of paint. Cut out loose plaster, prepared and painted ladies' toilet. Finished with aluminum five radiators and steam pipes. Painted main roof, rear and side extension roofs and front porch roof. Painted metal ceilings in the Office of Public Buildings and put on three coats of paint in the main toilet. Doors, windows and trim painted with two coats of paint. Hard wood partitions cleaned and varnished. Sash reglazed wherever required.

Grounds.—The grounds adjoining the building have been regularly cared for, flower beds planted, shrubbery trimmed and lawns kept in order.

TOWN HALL, JAMAICA.

Carpentry.—Built entire new porch on Flushing Avenue side of the building, repaired front and rear porches, repaired floors and base, rehung double action doors, repaired gutters for tinsmith, put in new sash cord, repaired window frames, took down storm porch, repaired and put up same in Fall, built and hung bulletin board, repaired furniture and made general repairs as required.

Plumbing.—Cleaned closets and urinal wastes, repaired closets and faucets and urinal tanks, thawed and repaired frozen water pipe, disconnected water meter, had same repaired and reset, repaired drinking fountain in front of building, made general repairs to plumbing when necessary.

Steam Fitting.—Repaired automatic damper regulator and water column, also blow-off valve on both boilers, put on new air valves, packed and repaired all radiators, radiator valves. Put in valves on water lines to boilers, repaired and packed main valves on boilers and blow-off valves, put in new diaphragm.

Tinsmithing and Sheet Metal Work.—Repaired galvanized iron leaders, roofs and gutters, repaired boiler doors, repaired roofs of extensions, made and installed strainers in leader pipes, repaired ash cans and other utensils.

Electrical Work.—Repaired bell and annunciator system and recharged batteries. (During the year an electric lighting system has been installed by contract.)

Painting.—Painted new leaders and gutters, cut out and replastered cracks in side walls, painted metal ceilings two coats and side walls three coats, grained and varnished woodwork in the Special Sessions Court Room, scraped rust from 516 feet of iron fence and painted same with one coat of red lead and one coat of dark green, painted new side porch three coats and all woodwork on front and rear porches, painted main and extension roofs, gutters and leaders, reputtied and painted sash.

Iron Fence.—170 feet of new iron fence was put up and 346 feet of old iron fence repaired under contract.

Grounds.—The grounds adjoining the building on the east and north sides have received regular attention.

COMFORT STATION, JAMAICA.

Carpentry.—Put on door checks, eased doors, put on new seats in toilets, made cuttings for plumber, repaired closet tanks and made general repairs.

Plumbing.—Cleaned and repaired sewer pipes, cleaned and repaired closets and faucets, urinal and basin wastes. Put in thirteen new closet tanks and seats, made alterations to water supply, flush tanks and tank lifting rods, cleaned and repaired flushometers.

Tinsmithing and Sheet Metal Work.—Made and put up sheet metal casing for protection to electric switches, made and put on wrought iron cleats on closet seats.

Electrical Work.—Repaired ventilating motor machinery, installed starting box and switches, conduit and wiring for same, cleaned panel board and switch boxes and repaired lighting fixtures.

Painting.—Replastered and painted ceilings, painted sash, cleaned and varnished toilet doors, aluminized all steam pipes and iron railings. New vault lights were placed in sidewalk over the Comfort Station, and one broken marble partition was replaced, both under contract.

COUNTY BUILDING, JAMAICA.

This building is now in course of reconstruction under contract. Previous to the contractors taking charge the following work was performed under the supervision of this Bureau:

Carpentry.—Removed oak office partitions, Judge's bench, railings, etc., from the Surrogate's and County Clerk's offices and stored same in the basement of the Town Hall, Jamaica.

Plumbing.—Repaired closets, urinal tanks and faucets, cleaned urinal, basin and house drains, kept all plumbing in a serviceable condition.

Steam Fitting.—Repaired leaks in manifold of hot water boiler and packed hot water valves.

Tinsmithing and Sheet Metal Work.—Made temporary repairs to roof and valleys on building, relined closet tanks and made miscellaneous repairs.

Electrical Work.—Extended private telephone system to basement book bindery, installed portable fixtures, repaired private telephones, bell and lighting systems.

Painting.—Glazed throughout building as required.

MAGISTRATE'S COURT, FAR ROCKAWAY.

Carpentry.—Repaired floors and siding, Judge's bench and furniture, put in sash cords, repaired locks, made jambs for iron gate and hung same and made all general repairs as required.

Plumbing.—Repaired closet tanks, thawed and repaired frozen water pipes.

Steam Fitting.—Repaired leaky radiator, water column, damper regulator, safety valve, repacked radiator valves throughout building. Installed two radiators in toilet and storeroom, packed boiler valves.

Tinsmithing and Metal Work.—Taking apart, cutting and fitting in position window guards, drilled and countersunk holes for fastening same.

Electrical Work.—Installed new circuit wires, renewed lamps and made general repairs as required.

IN GENERAL.

In addition to the work performed in the buildings directly under the supervision of this Bureau, the following has been done by the employees:

Carpentry.—Rebuilt one story frame office building situated in 15th Street between 4th and 5th Streets, College Point, occupied as a local office of the Bureau of Highways, Sewers and Street Cleaning. Work consisted of putting on new siding, laying new flooring, putting on wainscoting, renewing sash and doors, making necessary cuttings for plumber and generally overhauling. Took down and rebuilt twenty feet of partition and built several closets in the office of the Topographical Bureau. Built shed in the Highway Corporation Yard, Nott Avenue, Long Island City, 158 feet long, 25 feet wide and 16 feet high. General jobbing work at Disposal Plants and Section Stations for the Bureau of Sewers and Street Cleaning.

Plumbing.—Put in water supply pipe at Corporation Yard, College Point. Put in new closet and urinal with water supply, waste, vent and soil pipes at Corporation Yard, Nott Avenue, Long Island City. Installed new toilet room, closet basin, waste, vent and water pipes from street at Corporation Yard, College Point. Put in new waste and water supply pipes, sink, etc., at Ingleside screen house, Bureau of Sewers. Put in closet and sink, soil, waste, vent and water supply with sewer pipes at Highway Corporation Yard, Flushing.

Tinsmithing and Sheet Metal Work.—Overhauled sheet metal work for Bureau of Highways at Corporation Yard, Long Island City. Made and put up galvanized iron smoke pipe protectors, galvanized iron flanges, hoodcaps for pipes, made and placed new leaders and repaired roofs and gutters at Corporation Yard, College Point. Put on new tin roof for closet shed at Corporation Yard, Long Island City.

Painting.—Painted with three coats of paint the exterior and interior of the one-story building 72 feet long, 17 feet wide and 12 feet high, reglazed sash, cleaned and varnished desks and chairs at the Corporation Yard, College Point. Removed old wall paper and loose plaster, replastered, painted and Murescoed six rooms and hallways in building situated at North First Street, Jamaica, occupied as a sub-station of the Bureau of Street Cleaning.

Masonry.—The following mason work has been done under the supervision of this Bureau by masons temporarily assigned from the Bureau of Highways:

Queens County Court House.—The back walls of three boilers were taken down and rebuilt, one boiler fireplace was relined with fire brick, new concrete was relaid where taken up to put in exhaust pipe in boiler room. In the basement hallway loose plaster was cut out, painted with damp proof paint and replastered. An opening for doorway was made on the first floor leading from Special Term

Court Room to the Judge's private room and all necessary brick and plaster work finished.

Borough Hall.—All necessary brick and plaster work made necessary by the installation of a new electric system was done on the second and third floors of the Post Office building, three doorways cut through a brick wall leading from the Hackett building to the Post Office building and necessary work done.

Saint Mary's Lyceum.—The boiler was relined with fire brick and plastering was done in the Magistrate's Court and Clerk's room.

Town Hall, Jamaica.—Plastering was done where necessary in the basement hallway, the boiler pit and parts of floor recemented.

Magistrate's Court, Far Rockaway.—Chimney on roof was rebuilt and cemented, brick work on wall leading to cellar was repaired, boiler pit rebuilt and floated with cement. A new man-hole was built in front of building to clean out main sewer trap.

The Mechanical Force employed in this Bureau, during the year was as follows: 2 foremen of laborers, 1 foreman of plumbers, 2 carpenters, 1 steam-fitter, 1 tinsmith, 1 electrician, 7 painters, 1 mechanic's helper, 5 laborers assisting mechanics.

Interior Bath.—The interior bath has been used extensively by males and females during the year as shown by the following monthly statement of attendance:

Males.				Females.			
Jan.	734	July	5,669	Jan.	99	July	2,259
Feb.	1,077	Aug.	7,480	Feb.	330	Aug.	3,923
Mar.	2,364	Sept.	5,930	Mar.	645	Sept.	3,004
Apr.	2,530	Oct.	6,030	Apr.	1,021	Oct.	2,595
May	4,982	Nov.	4,952	May	1,416	Nov.	2,091
June	5,123	Dec.	3,134	June	2,128	Dec.	1,871
Total		50,005		Total		22,382	

Note.—Bath closed for repairs: Men's side from Jan. 20 to Feb. 12, women's side from Jan. 8 to Feb. 12.

Floating Bath.—The floating bath has not been in commission during the past year owing to the fact that funds required to make necessary repairs were not available until too late in the season, also owing to the objection of the Department of Health to the use of floating baths in the rivers around New York City on account of the polluted condition of the same. The bath is now stored in the basin foot of 23rd Street, Brooklyn.

Office Equipment and Supplies.—*Janitor's Supplies.*—Office equipment, such as furniture, floor covering and all necessary office supplies, have been provided for the offices of the Bureaus under the jurisdiction of the Borough President upon requisition. All cleaning material, fuel, etc., required by the Janitors of the various buildings have been regularly supplied during the year.

All of which is respectfully submitted.

BUREAU OF STREET CLEANING

REPORT OF THE BUREAU OF STREET CLEANING FOR THE YEAR
ENDING DECEMBER 31, 1914.

Duties of Bureau:

The duties of the Bureau of Street Cleaning are to clean the streets of the borough which are paved with Class "A" pavement; to collect and dispose of garbage, ashes, rubbish and street sweepings, and to remove snow and ice from the principal thoroughfares of the borough.

Methods Employed:

During the year streets were cleaned by hand and by horse-driven sweeping machines. Refuse material was disposed of at inland dumps, crematories, scows, piggeries and by reduction.

Garbage, ashes, rubbish and street sweepings were collected by horses and carts, trucks and teams, employed by the Bureau at a specified rate per day.

Snow and ice were removed by the Bureau force and by emergency laborers, trucks and teams, horses and carts, employed by the day.

Railway companies operating in Queens removed snow from designated streets under an agreement with this Bureau by which they were to remove snow and ice from an area of 638,635 sq. yds.

Summary of Year's Work:

Refuse collections were extended to approximately 25,000 additional residents of Queens Borough, and a new development in the Fourth Ward, known as Idlewild Park, was included in our collection territory.

Approximately four miles of paved streets were added to our cleaning area.

The contract price for furnishing and operating scows, tugs, labor, etc., for the final disposition of garbage in the Fifth Ward, for the year 1914, was \$4,700, this estimate being lower by \$5,000 than the cost of this work for the previous year.

In addition to removing garbage by scow it became necessary to arrange to have the rubbish and ashes removed from the Fifth Ward during the summer months of 1914, as an injunction was obtained restraining the City from depositing material of this kind at inland dumps in this vicinity. The cost of this work was \$240 a week.

The first contract for the privilege of reclaiming material deposited at dumps of this Bureau was let during the year 1914, the contract price for this privilege being \$88 a week. The contractor also furnishes the labor and implements for leveling and grading dumps and for feeding and stoking incinerators.

Proposed New Construction:

Bids for the construction of a waste destructor, section station and stable, to be erected at Flushing and Metropolitan Avenues, Maspeth, were advertised for and received. This work has been delayed due to the protests of residents of this locality. The estimated cost of this work, including site, is \$202,000.

The Corporation Counsel has been directed to commence condemnation proceedings for the acquisition of site in the Fifth Ward (Rockaways), on which will be erected a waste destructor, section station and stable. The estimated cost of same, including site, is \$101,000.

Corporate Stock, to an amount not exceeding \$75,000, has been authorized to provide means for the payment for site for refuse destructor and section house for the Bureau of Street Cleaning, and for central garage, yard and buildings for the Bureaus of Sewers and Highways, architect's fees for preliminary study, and estimated cost for the erection of buildings.

Several pieces of property are now under consideration and the purchase of the most desirable one will be recommended to the Board of Estimate early in 1915.

A Sanitary Engineer and Architect was employed by this Bureau to assist the development of a refuse-destructor system for this borough.

The Board of Estimate and Apportionment has been requested to authorize the issue of Corporate Stock in the sum of \$200,000, for the purchase of site and construction of a waste destructor, etc., at South Jamaica.

New Equipment:

A new type of rubbish truck of 300 cubic feet capacity was purchased during the year 1914, and operated successfully in the Fifth Ward (Rockaways).

Recommendations:

I recommend that section stations be secured by this Bureau at Richmond Hill, Rockaway Beach and Far Rockaway.

That funds be provided for the acquisition of site and erection of refuse destructor, section station, stable, etc., be located in the Third Ward.

That a special request be made to the Board of Estimate to authorize the issue of Corporate Stock in the sum of \$200,000, for waste destructor in the Fourth Ward.

(Crematories in the Third and Fourth Wards are unable to dispose of all the garbage and rubbish collected).

That condemnation proceedings now pending, for the acquisition of site in the Fifth Ward, be conducted.

That a site be secured on which to erect a waste destructor in Long Island City, in order that a more sanitary method of disposing of garbage and rubbish may be available.

The attached tables, showing quantities of work performed, distribution of force employed, and cost data, are respectfully submitted.

TABLE No. 5.

BUREAU OF STREET CLEANING—EXPENSE DISTRIBUTION AND UNIT COST DATA FOR THE YEAR 1914.
Indirect Charges.
 (General.)

Budget Classification.	Admin- istration Service.	Motor Vehicle Service.	Equipment Service, Executive.	Equipment Collection and Disposal of Refuse.	Super- vision.	Vacations.	Stores.	Corporation Yard and Section Sta- tion Service.	Live Stock Service and Stable Expense.
<i>Personal Service—</i>									
Salaries, Regular Employees.....	\$9,504.16	\$1,050.00	.....	.....	\$48,713.22	\$5,693.62	\$1,643.19	\$1,839.43	\$1,791.20
Wages, Regular Employees.....	.....	.....	.....	\$4,512.90	.....	.....	.....	.....	.....
<i>Supplies—</i>									
Office Supplies.....	97.55	.....	.....	.....	.....	.....	.....	.....	.....
General Plant Supplies.....	18.25	.....	.....	32.90	.....	.....	.....	.68	.....
Motor Vehicle Supplies.....	.....	157.54	.....	.....	.....	.....	.....	192.15	.....
Fuel Supplies.....	.....	.....	.....	21.45	.....	.....	.....	.....	.....
<i>Materials—</i>									
Building Materials.....	.....	.....	.....	.....	.....	.....	.....	13.63	.....
General Plant Materials.....	.....	.....	.....	817.74	.....	.....	.....	11.22	.....
<i>Equipment—</i>									
General Plant Equipment.....	.....	.....	\$31.35	4,418.10	.....	.....	.....	61.05	315.40
Motor Vehicles and Equipment.....	.....	137.51	.....	3,367.11	.....	.....	.....	.....	64.00
Motorless Vehicles and Equipment.....	.....	.....	.....	124.33	.....	.....	.....	.....	.....
Wearing Apparel.....	.....	.....	130.99	.....	.....	.....	.....	.....	.....
Office Equipment.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<i>Contract or Open Market Order</i>									
<i>Service—</i>									
General Repairs.....	.....	.....	.....	561.20	.....	.....	.....	.....	8.35
Storage of Motor Vehicles.....	.....	240.00	.....	.....	.....	.....	.....	.....	.....
Motor Vehicle Repairs.....	.....	330.84	.....	.....	.....	.....	.....	.....	.....
<i>Transportation:</i>									
Hire of Horses and Vehicles with Drivers.....	.....	.....	.....	28.69	.....	.....	226.21	.....	.....
Carfare.....	259.39	.....	.....	39.55	.....	.....	.....	33.15	.....
Expressage and Delivery.....	.....	.....	.....	15.11	.....	.....	4.86	.....	.....
Shoeing and Boarding Horses.....	.....	.....	.....	.....	.....	.....	.....	.....	1,938.29
General Plant Service.....	.....	.....	.....	.....	.....	.....	100.00	.....	.....
Communication:									
Telephone Service.....	7.95	.....	.....	.....	.....	.....	.....	.....	.....
Contingencies.....	10.71	.....	.....	4.00	.....	.....	.....	.....	.....
	\$9,898.01	\$1,915.89	\$162.34	\$142,308.00	\$48,713.22	\$5,693.62	\$1,974.26	\$2,151.31	\$4,117.24

TABLE No. 6.
BUREAU OF STREET CLEANING, QUEENS—EXPENSE DISTRIBUTION AND UNIT COST DATA
FOR THE YEAR 1914.

DIRECT CHARGES.

Final Disposition at Crematories.

Functional Activities.	Sub Totals.	Totals.	Cu. Yds.	Unit Cost.
OPERATION—				
<i>Personal Service:</i>				
Wages, Regular Employees.....	\$4,979 80	.....	.....	.....
<i>Supplies:</i>				
General Plant Supplies.....	1 50	.....	.....	.....
Fuel Supplies	1,210 17	.....	.....	.....
<i>Equipment Issued as Consumable Stores:</i>				
General Plant Equipment.....	333 40	.....	.....	.....
<i>Contract or Open Market Order:</i>				
Hire of Horses and Vehicles with Drivers	3 50	\$6,528 37	40,504	.161+
General Plant Service.....	.....	20 00	.....	.....
REPAIRS AND REPLACEMENTS—				
<i>Building and Structure:</i>				
<i>Materials:</i>				
Building Materials	137 49	.....	.....	.....
General Plant Materials.....	93 44	.....	.....	.....
<i>Contract or Open Market Order:</i>				
General Repairs	768 00	998 93	.....	.....
<i>Plant Equipment:</i>				
<i>Materials:</i>				
Building Materials	41 33	.....	.....	.....
General Plant Materials.....	372 67	.....	.....	.....
<i>Equipment Issued as Consumable Stores:</i>				
General Plant Equipment.....	151 43	.....	.....	.....
<i>Contract or Open Market Order:</i>				
General Repairs	140 00	705 43	.....	.....
		<u>\$8,252 73</u>	<u>.....</u>	<u>.161+</u>

Final Disposition at Dumps.

OPERATION—				
<i>Personal Service:</i>				
Wages, Regular Employees.....	\$16,489 59	.....	.....	.....
<i>Supplies:</i>				
Laundry, Cleaning and Disinfecting Supplies	5 40	.....	.....	.....
<i>Equipment Issued as Consumable Stores:</i>				
General Plant Equipment.....	1 91	.....	.....	.....
<i>Contract or Open Market Order Service:</i>				
Hire of Horses and Vehicles with Drivers	1,081 54	\$17,578 44	402,584	.043+
INSPECTION—				
<i>Personal Service:</i>				
Wages, Regular Employees.....	2,941 13	.....	.....	.....
<i>Contract or Open Market Order Service:</i>				
Carfares	239 50	3,180 63	402,584	.0079+
		<u>\$20,759 07</u>	<u>.....</u>	<u>.0079+</u>

TABLE No. 6—Continued.

Functional Activities.	Sub Totals.	Totals.	Cu. Yds.	Unit Cost.
<i>Final Disposition at Scows.</i>				
DISPOSAL OF GARBAGE AND RUBBISH—				
<i>Contract or Open Market Order</i>				
<i>Service:</i>				
General Plant Service (Disposal of Garbage)	\$5,052 50	\$5,052 50	6,364	\$0.793+
General Plant Service (Disposal of Rubb. and Ashes)	\$1,920 00	1,920 00	11,346	.169+
		\$6,972 50	.....	.....

TABLE NO. 7.
BUREAU OF STREET CLEANING, QUEENS.*Report of Snow Storms.*

1914	Depth of fall (inches)	Cubic Yards Removed
January 6	1.1	945
February 13 and 14	9.7	146,396
February 16	5.2	
February 17 .....	.1
February 19 .....	.8
February 23 and 24	1.1	
March 1 and 3	14.5
March 6 and 7	3.3	
March 22	3.5	
	39.3	147,341

TABLE NO. 8.
BUREAU OF STREET CLEANING.
Maximum Force Employed During 1914.

Superintendent	1
Clerk	4
Stenographer & Typewriter	1
District Superintendent	5
Section Foreman	16
Assistant Section Foreman	14
Assistant Foreman	2
Dump Inspector	1
Assistant Dump Inspector	2
Dump Boardman	14
Stoker	1
Coal Passer	4
Sweeper	196
Laborer	33
Driver	1
Horse and Cart	132
Team and Truck	60
Team and Sweeper	6
Horse and Sprinkler	6
Auto Engineman	1

TABLE NO. 8—Continued.

Additional Force Employed in Snow and Ice Removal.

Laborer	1503
Team & Truck	176
Horse & Cart	28

TABLE NO. 9.

BUREAU OF STREET CLEANING.

Distribution of Bureau Force as of December 31, 1914.

Title	Admin. Office	Ward 1	Ward 2	Ward 3	Ward 4	Ward 5	Total
Superintendent	1	..	..	..	..	..	1
Clerk	3	..	..	..	..	..	3
Stenographer and Typewriter....	1	..	..	..	..	..	1
Storekeeper	1	..	..	..	..	..	1
Auto Engineman	1	..	..	..	..	..	1
District Superintendent .....	..	1	1	1	1	1	5
Section Foreman .....	..	5	5	3	2	1	16
Assistant Section Foreman.....	..	4	3	2	4	..	13
Assistant Foreman .....	..	1	1	..	..	..	2
Dump Boardman .....	..	3	1	5	4	1	14
Stoker .....	..	1	..	..	..	..	1
Driver .....	..	1	..	..	..	..	1
Coal Passer .....	..	1	..	..	2	1	4
Laborer .....	..	10	9	3	9	2	33
Sweeper .....	..	72	65	20	29	10	196
Horse and Cart.....	..	36	30	24	33	6	129
Truck and Team.....	..	8	22	2	10	9	51
	7	143	137	60	94	31	472

BUREAU OF SEWERS

BUREAU OF SEWERS—ANNUAL REPORT ON MAINTENANCE FOR THE
YEAR ENDING DECEMBER 31, 1914.

The maintenance forces in this Bureau are employed uniformly throughout the year without change in number or personnel, except for the filling of vacancies that may occur, or the temporary interchange of men between sections as occasion demands. There has been but little increase in our forces since 1911, while the sewer systems have been rapidly extended. Thus the increasing amount of work demanded of the gangs has resulted in some decrease in unit costs. It was necessary, however, to provide an additional gang in the Richmond Hill section this year, as the sewers recently constructed there cover an entirely new and extensive area, approximately 2,000 acres.

In the well developed sections, as in Long Island City and in Ridgewood, where large numbers of catch basins are provided in close proximity, basin cleaning gangs are specially detailed on this work. In other sections where there are fewer basins and they are consequently farther apart, the basin cleaning is done by gangs employed on general sewer and culvert cleaning, but cannot be as economically performed, since these general gangs are provided with but one horse and cart.

Since the first of the year the testing of cement and other construction materials, performed for some time under the direction of this Bureau, for both the Sewers and Highways Bureaus, has been turned over to the new Borough laboratory and the cement tester transferred to that schedule. The original report and record forms for cement testing were printed to provide for this anticipated change.

AMOUNT OF WORK DONE BY THE SEWER MAINTENANCE FORCES.

WORK PERFORMED DURING THE YEAR 1914.

	Quarters Ending				
	March 31.	June 30.	September 30.	December 31.	Annual Total.
Number of basins cleaned..	1,914	2,473	2,515	2,426	9,328
Loads removed	1,525	3,008	2,717	2,577	10,291
Cubic yards removed.....	1,711	3,060	2,857	2,663	9,827
Basins relieved	6,820	863	384	1,658	9,725
Basins repaired	4	104	62	27	197
Linear feet of sewers cleaned	518,119	874,100	867,050	738,194	2,997,463
Loads removed	1,331	1,679	1,413	1,882	6,305
Linear feet of sewer repaired	542	541	455	377	1,915
Linear feet of drains cleaned	67,946	78,825	58,675	60,016	265,462
Loads removed	327	387	277	662	1,653
Cubic yards of snow removed					
from gutters	7,000				
Manholes cleaned	3,727	4,695	4,070	3,896	16,388
Manholes repaired	16	54	66	159	295
Gallons of sewage pumped					
and treated					
Newtown disposal plant....	50,434,000	71,293,000	67,275,000	66,923,000	255,925,000
Jamaica disposal plant.....	285,516,000	273,465,000	268,542,000	250,822,000	1,078,345,000
Far Rockaway disposal plant	79,550,000	141,859,750	158,361,000	86,794,000	466,564,750

A comparison of the work done and the unit costs for the years 1911, 1912, 1913 and 1914 is made in the following table:

BASINS.				
	1911.	1912.	1913.	1914.
Number of basins cleaned.....	6,945	8,847	9,910	9,328
Loads removed .....	.....	.....	10,775	10,291
Cubic yards removed.....	9,490	10,793	10,959	9,827
Cost per basin.....	\$3.50	\$2.93	\$2.61	\$2.48
Cost per cubic yard.....	\$2.54	\$2.40	\$2.37	\$2.35
Total cost	\$24,174.00	\$25,899.00	\$25,857.00	\$23,147.00

SEWERS.				
	1911.	1912.	1913.	1914.
Number of miles of sewer cleaned..	245	351	415	570
Number of manholes cleaned.....	7,902	10,335	11,450	16,385
Cost per mile.....	\$93.00	\$70.36	\$72.40	\$46.00
Total cost	\$22,922.00	\$24,696.00	\$30,054.00	\$26,190.00

JAMAICA DISPOSAL PLANT.

At the Jamaica Disposal Plant the condition most disturbing to the satisfactory operation of the plant is the very limited area available for the drying of sludge. The wet sludge pumped from the sedimentation tanks consequently accumulates to a depth of 3 or 4 ft., which is four times as great as should be permitted for rapid and convenient drying and removal. As these sludge drying beds are for the greater part of the year filled with wet sludge, with the possibility of violation of an injunction prohibiting encroachment on adjoining property, the sedimentation tanks cannot be cleaned as often as is desirable. The result is that the accumulated sludge in the tanks so reduces the cross section of the sewage flow that the higher velocities attained preclude the possibility of effective sedimentation for clarification; very strong septic action in the old sludge also follows, resulting in the fouling of the fairly clear effluent by large quantities of black sludge occasionally blown up into it from the bottom of the tanks by the formation of gas bubbles. The sedimentation tanks should be cleaned at least once a week, whereas we have been compelled to allow them to run for several months under existing circumstances. More of the adjoining land should be purchased for the needs of this plant, as well as for the Bureau of Street Cleaning, whose incinerator occupies part of the land originally provided for sewage disposal. The injunction above referred to was made permanent after trial of the damage suit *Bergen vs. The City of New York*, on October 13th, 1914. Since the field tests and pot experiments on the fertilizing value of sludge were conducted last year in co-operation with Professor O. S. Morgan of Columbia University, greater interest has been displayed in the matter; several additional farmers, by hauling away this material, indicating that they considered it at least worth the cartage during the winter months.

Outside the regular work done at this plant by departmental labor, the following work was performed by contract on open market orders:

Scraping and repainting all structural steel work in the building; new cornices, and removal of the old stock in disuse since commercial electricity was substituted for steam power.

FAR ROCKAWAY DISPOSAL PLANT.

The flow of sewage to this plant has been steadily increasing, and a large additional contribution has been brought to the plant by the construction of the Redfern Avenue sewer. This also necessitated the extension of the bar screen in the receiving well to cover the new sewer inlet. Other work done by the contract was as follows:

Renewal of valve seats, valves and springs in 2 Snow Plunger Pumps; stack repair; repairing and repainting a portion of the roof; and painting the inside of the building. It will soon become necessary to make thorough repairs to the 2 electric-driven centrifugal sewage pumps, used formerly at the St. Nicholas Avenue sewer and installed here as auxiliary to the steam-driven pumps.

The three pneumatic ejector stations, driven by compressed air from the main plant, have given very little trouble since they were overhauled and repaired last year. The Wavecrest and Ostend electric-driven centrifugal sewage pumping stations are also giving very satisfactory service.

NEWTOWN DISPOSAL PLANT.

On account of the comparatively small quantity of sewage (800,000 to 900,000 gallons per day) pumped and treated at the Newtown Plant, its operating costs per million gallons has appeared very high, since with the steam-operated plant the same force is required on each eight-hour shift as would be needed to handle 10,000,000 gallons, making the unit cost appear ten times as great. Since, however, the method provided at this plant for the disposition of sludge is by steam drying and incineration under the boilers, these boilers and the steam operation in general could not well be abandoned in favor of more economical pumping by commercial electric power, until some satisfactory alternative method of handling the sludge were obtained. Experiments in 1913 at the Jamaica and Far Rockaway Plants with two devices for drying sludge, led to the installation at the Newtown Plant, with the consent of the Borough President, given on January 14th, 1914, of an electro-chemical process of sewage purification invented by Mr. C. P. Landreth. This process promised not only a highly purified effluent, but also an inoffensive sludge. The apparatus furnished for these experiments was capable of treating only 25,000 gallons per day, but the results obtained were very favorable and promised well for its operation on a larger scale. However, in November representatives of the Sewer Plan Committee and the Bureau of Municipal Research, in a report on tests made independently, expressed doubt as to the process being used effectively and economically in the treatment of the entire flow at the plant. It was, therefore, decided to test the process further and permission was granted to the Electro-Chemical Corporation for the installation without cost to the City of similar apparatus of sufficient capacity to treat all the sewage pumped, and tests are to be continued on the larger and improved machine.

The power lines of the New York and Queens County Electric Light and Power Company were extended to serve this plant, and power was available on March 16th, and was metered separately for use in the electro-chemical process. The installation of the electric-driven centrifugal sewage pump started in 1913 was not at that time completed, but was finally accepted on August 7th. It had been erected in place of one of the two steam-driven pumps, looking towards the ultimate electrification of the entire plant. The other steam pump is to be used, however, so long as it is necessary to generate steam for the drying and burning of sludge, and will be replaced finally with a reserve electric pumping unit of smaller capacity than the one now installed.

Other contract work at this plant during the year comprised screens in the sewage receiving well; relining the remaining steam-driven pump; new metal skylights over the tank room; new roof supports under the same; and repairs to roof gutters and leaders.

INGLESIDE SCREEN HOUSE.

The screen house built over the outlet of the Ingleside sewer, which was provided temporarily to permit immediate use of this sewer system pending more permanent provision for sewage treatment, had received only such attention as was needed, and could be given, by the sewer maintenance gang operating in this locality. On complaint of residents, however, three laborers were early this year detailed to give this screening plant constant attention, each man being employed on an eight-hour shift. A gas-burning incinerator for the screenings was installed and a gas supply main laid. A record is being kept of the weight of screenings burned and of the remaining ash.

SPECIAL SEWER CLEANING AND REPAIR WORK.

Sewer repair work by contract completed during the year included the reconstruction of the pipe sewer in the Boulevard, between Alexander and Jerome Avenues, Arverne; the replacement of the broken pipe outlet sewer in Division Avenue, Jamaica Bay, with cast-iron pipe; and a surface water drain with two park basins in Leavitt Street, from Osgood Place to Covert Place, Flushing.

During the fall the main sewer in Queens Boulevard, between Broadway and the Disposal Plant, was cleaned by our maintenance forces with a gasoline hoisting machine and trip-bottom buckets and the material was deposited on property adjoining the plant, where permission was granted by the owner. The amount of material removed was approximately 750 cubic yards, this accumulation being due to the fact that the sewer, while originally intended to carry storm water, was never extended to its natural outlet to permit the rapid escape of surface water with its heavy deposit of road grit. The extension of this outlet, when accomplished, will also permit the connection of more catch basins, which are urgently needed in this section.

The sewer in South Street, Jamaica, and its continuation in Rockaway Road, was broken and repaired three times during the year—on February 9th, on South Street, between Norris and Brown Avenues; on March 16th, on South Street, near Brown Avenue; and on May 16th, on Rockaway Road, 75 feet south of South Street. Attention has been drawn on many occasions to the possibility of sudden and extensive failure of this old cement pipe sewer, with consequent damage to property, over a wide area in Jamaica. The question of providing funds for its reconstruction seems to involve consideration of whether the expense is assessable on property benefited, or should be paid out of tax-levy funds.

The relief of flooded sections by means of portable gasoline centrifugal pumps has been continued during the year.

TABLE NO. 1.

REFUSE MATERIAL COLLECTED DURING 1914 AND PLACE OF DISPOSAL OF SAME.

(By Cubic Yards.)

	Dumped In Lots.					At Crematory.				At Scow							
	Ashes.	Garbage.	Rubbish.	Mixed Material.	Sweepings.	Total.	Garbage (Dept. Cart.).	Rubbish (Permit Cart.).	Total.	Pig-gery.	Ashes and Rubbish. (Dept. Cart.).	Garbage (Permit Cart.).	Total.				
January	23,963	2,383	4,344	9,937	451	41,078	71	6,298	226	212	7,208	.....	.....	48,498	
February	19,794	1,627	4,395	10,409	224	36,449	384	4,637	151	102	5,235	.....	.....	41,786	
March	21,584	1,633	5,419	11,632	255	40,572	255	5,700	214	109	5,250	.....	.....	45,931	
April	12,573	1,141	4,956	19,679	2,744	41,093	754	5,646	259	172	5,971	.....	.....	48,003	
May	6,939	1,217	8,250	22,092	3,515	42,013	1,015	4,562	276	178	5,931	.....	.....	48,122	
June	5,078	1,911	9,951	24,275	3,721	44,936	1,024	4,388	440	294	6,014	.....	.....	52,200	
July	4,363	2,456	8,756	22,868	4,137	43,562	1,208	4,795	347	69	5,310	.....	.....	52,834	
August	3,854	3,507	9,672	20,952	3,795	41,220	735	199	3,385	441	1,689	.....	.....	52,834	
September	6,002	2,530	10,565	24,371	4,159	39,527	1,706	4,981	376	.....	2,676	.....	.....	51,540
October	7,853	1,515	8,805	20,734	3,456	47,627	2,038	95	6,003	42	7,493	.....	.....	56,342	
November	11,079	1,361	8,606	23,741	3,255	42,363	1,430	.....	3,511	55	4,996	.....	.....	47,359
December	15,781	23,624	91,758	231,901	33,418	48,042	1,247	.....	3,533	24	4,804	.....	.....	52,880
Total	126,781	23,624	91,758	231,901	33,418	507,482	12,409	1,235	56,439	3,166	73,249	1,178	9,367	6,362	2	1,979	599,619

TABLE NO. 2.

AREA IN SQUARE YARDS OF PAVEMENT CLEANED BY BUREAU OF STREET CLEANING AS OF DECEMBER 31, 1914.

District (Ward)	Granite	Asphalt	Wood Block	Brick	Blue Trap Rock	Hassan	Concrete	Total Sq. Yds.
1st	184,608	741,533	76,962	9,709	.....	.....	.....	1,012,812
2d	287,553	321,520	17,779	93,110	666	8,110	.....	728,738
3d	3,733	112,842	63,185	.....	.....	.....	1,778	181,538
4th	78,783	164,369	17,020	4,700	.....	.....	.....	264,872
5th .....	.....	14,359	1,674	63,739	.....	.....	.....	79,772
Total	554,677	1,354,623	176,620	171,258	666	8,110	1,778	2,267,732

TABLE NO. 3.

STATEMENT SHOWING THE AVERAGE NUMBER OF TIMES PAVEMENT IS CLEANED, AS OF DECEMBER, 1914.

Ward.	Number of Times Cleaned Per Week.										Once Every Two Weeks.	Once Every Month.	Total Sq. Yds. Cleaned in Each District.				
	19.	18.	13.	12.	11.	10.	9.	8.	7.	6.				5.	4.	3.	2.
1st Dist.	11,120	322,869	38,642	19,320	8,782	317,038	75,374	69,692	45,625	22,834	71,476	4,634	5,216	1,012,812
2d Dist.	....	....	....	74,220	5,100	1,033	....	....	484,098	28,138	24,006	31,854	26,087	38,827	12,308	3,067	728,738
3d Dist.	....	....	4,200	42,188	....	....	....	6,667	83,340	....	....	....	....	7,667	6,180	31,296	181,538
4th Dist.	7,087	16,931	23,537	126,648	....	8,733	42,163	....	9,000	....	3,618	27,155	....	....	....	....	264,872
5th Dist.	....	....	....	1,500	....	....	....	....	51,102	....	....	5,041	1,973	11,359	....	8,797	79,772
Total	7,089	28,051	27,737	567,435	43,742	29,286	42,163	15,449	944,568	103,512	102,357	106,607	60,280	117,970	23,122	48,376	2,267,732

TABLE NO. 4.

EXPENSE DISTRIBUTION AND UNIT COST DATA FOR THE YEAR 1914.

Street Cleaning, Refuse Collection and Snow Removal.

Functional Activities.	Contract or Open Market Order, General Plant Service.	Wages Regular Employees.	Vehicular Transportation.	Total Cost.	Work Done.	Unit.	Unit Cost.
Cleaning Gutters	....	\$198 01	....	\$198 01	....	....	....
Sweeping	....	114,745 87	....	114,745 87	520,624 437	sq. yds.	.00022
Collection of Refuse and Sweepings	....	20,639 48	\$231,429 21	252,068 69	595,216	cu. yds.	.423 +
Sprinkling and Sweeping Streets by Machine	....	2,803 56	6,672 14	9,475 70	14,136,295	sq. yds.	.00067
Snow Removal	\$43,464 92	11,730 47	1,272 70	56,468 09	147,341	cu. yds.	.383 +
Total	\$43,464 92	\$150,117 39	\$239,374 05	\$432,956 36	....	....	....

BUREAU OF HIGHWAYS

REPORT OF THE BUREAU OF HIGHWAYS FOR THE YEAR ENDING DECEMBER 31, 1914.

Under Chapter 388 of the Charter of the City of New York, the Bureau of Highways is maintained by the President of the Borough for the purpose of regulating, grading, regrading, curbing, flagging and guttering of streets, the laying of crosswalks, the construction and repairing of public roads, paving and repaving and repairing of all streets and the relaying of all pavements removed for any cause, the filling of sunken lots and all matters relating thereto. This Bureau also issues permits for street openings, and incumbrances, also the erection of street signs.

Therefore the main functions of this bureau may be summarized as follows: The new construction of street pavements; the relaying of pavements; the maintenance of roadways, viaducts and streets, and removal of encumbrances, the supervision of work done by railroads and other public service corporations; the issuing of permits for street openings and incumbrances, and the erection of street signs.

In order that these functions may be properly performed there are employed by this bureau six ward foremen, twenty-six various foremen, twenty-two assistant foremen, four carpenters, three hundred and fifty laborers, ten steam roller engineers, two blacksmiths and one blacksmith's helper, twenty-five pavers, nine rammers, one stone mason, one brick layer and seven painters. This constitutes the average force employed during the year. These employees are made up into gangs which are distributed throughout the borough according to the work to be done.

They have to cover approximately 1,400 miles of roadways, which it is the business of this bureau to maintain, including new construction and the making of repairs. This work is very extensive and requires 189 distinct operations of classified expense distribution.

A number of statements appear in the following pages which will give a more detailed idea of what has been accomplished by the bureau during the year.

BUREAU OF HIGHWAYS.

STATEMENT OF WORK DONE BY MAINTENANCE FORCES FOR THE YEAR ENDING DECEMBER 31, 1914.

	March 31st.	June 30th.	Septem- ber 30th.	Decem- ber 31st.	Annual Totals.
Macadamized Streets.					
Square yards of macadam pavement repaired	6,201	115,445	545,822	291,578	959,046
Square yards of macadam pavement cleaned	9,446	54,466	244,758	82,785	391,455
Square yards of macadam pavement picked up	934	44,398	51,838	1,500	98,670
Square yards of dirt wings cleaned and honed .....	....	323,008	196,307	99,222	618,537
Square yards of macadam pavement finished	181	300,343	523,916	104,642	929,082
Linear feet of gutters cleaned.....	17,350	138,127	32,622	139,419	327,518
Linear feet of crosswalks relaid....	813	130	254	153	1,350
Linear feet of curb reset.....	....	228	90	24	342
Linear feet of guard rail built.....	....	170	....	....	170
Linear feet of headers set.....	....	28	5,220	2,285	7,533
Linear feet of dirt wings honed and repaired	12,183	135,175	....	....	147,358
Cubic yards of sidewalks repaired..	....	150	....	....	150
Cubic yards of gutters cleaned.....	....	500	....	....	500
Cubic yards of excavating.....	....	9	....	....	9

STATEMENT OF WORK DONE BY MAINTENANCE FORCES FOR THE YEAR ENDING
DECEMBER 31, 1914—Continued.

	March 31st.	June 30th.	Septem- ber 30th.	Decem- ber 31st.	Annual Totals.
Square yards of roadway covered with tarvia .....	....	61,824	404,469	24,065	490,358
Square yards of macadam pavement scarified .....	....	12,849	.....	.....	12,849
Square yards of macadam pavement sprinkled .....	....	130,396	485,540	90,182	706,118
Square yards of dirt wings filled in..	....	119	.....	.....	119
B. M. feet of timber used.....	....	121	.....	.....	121
Cubic yards of washouts filled in....	28	1,034	.....	114	1,166
Square yards of broken stone spread on picked-up bottom.....	877	35,865	.....	.....	36,742
Square yards of gutters paved.....	....	.....	.....	420	420
Paved Streets.					
Square yards of granite pavement repaired	460	9,882	31,456	16,367	58,165
Square yards of asphalt block pave- ment repaired	972	825	.....	.....	1,797
Square yards of brick pavement re- paired	180	5,749	13,262	3,120	22,311
Square yards of asphalt pavement sanded	6,000	1,840	.....	.....	7,840
Square yards of gutters paved.....	158	68	.....	4,357	4,583
Linear feet curb reset.....	25	4,496	7,480	10,250	22,251
Linear feet gutters cleaned.....	13,080	3,176	.....	29,905	46,161
Linear feet guard rail built.....	250	.....	.....	.....	250
Square yards gutters cleaned.....	800	11,740	17,126	20,278	49,944
Square yards wood block pavement sanded	5,654	.....	2,265	.....	7,919
Square yards old pavement removed.	1,824	.....	.....	.....	1,824
Cubic yards of washouts filled.....	76	.....	.....	.....	76
Square yards of trap rock pavement repaired	13	341	.....	.....	354
Square yards of cobble pavement repaired	15	3,566	8,162	771	12,514
Square yards of wood block pave- ment repaired .....	....	2,333	358	3,021	5,712
Linear feet headers dressed.....	....	55	4,858	.....	4,913
Square yards of flagstones repaired.	....	136	336	.....	472
Square yards of asphalt pavement repaired .....	....	7,379	9,279	11,429	28,087
Square yards of crosswalks repaired.	....	4,644	.....	234	4,878
Square yards of crosswalks cleaned..	....	4,844	.....	.....	4,844
Square yards of stone gutters con- structed .....	....	.....	15,559	.....	15,559
Square yards of bitulithic pave- ment repaired .....	....	.....	276	.....	276
Unimproved Streets.					
Square yards of roadways graded..	3,886	422,617	295,452	173,665	795,620
Square yards of roadways sprinkled.	....	898,400	30,930	.....	929,330
Linear feet of guard rail built around washouts	530	636	658	.....	1,824
Square yards of gutters cleaned....	8,994	23,063	17,873	970	50,900
Linear feet of gutters formed and cleaned	22,732	231,284	127,132	244,945	626,093
Cubic yards of retaining wall built..	49	.....	.....	.....	49
Square yards of sidewalks graded..	1,044	1,799	2,854	19,800	25,497
Cubic yards of rubbish removed from gutters	14	460	.....	.....	474
Cubic yards of washouts filled in....	1,590	3,223	14	.....	4,827

STATEMENT OF WORK DONE BY MAINTENANCE FORCES FOR THE YEAR ENDING
DECEMBER 31, 1914—Continued.

	March 31st.	June 30th.	Septem- ber 30th.	Decem- ber 31st.	Annual Totals.
Square yards of roadway oiled.....	....	502,072	551,861	100,496	1,154,429
Square yards of roadway cleaned....	7,636	38,664	.....	.....	46,300
Square yards of roadway crowned and repaired	740	182,195	112,486	53,327	348,748
Square yards of roadway plowed....	....	68,145	55,748	150	124,043
Cubic yards of excavating.....	....	.....	.....	451	451
Culverts.					
Linear feet of culverts built.....	16	113	.....	.....	129
B. M. feet of timber used.....	190	1,795	109	442	2,536
Linear feet of pipe laid.....	698	595	1,427	1,322	4,042
Cubic yards of excavation.....	120	315	388	379	1,202
Cubic yards of filling.....	95	200	195	287	777
Square yards of culverts cleaned....	....	60	16	25	101
Linear feet of culverts cleaned.....	....	200	.....	.....	200
Cubic yards of rubbish removed.....	92	29	.....	.....	121
Cubic yards of masonry laid.....	....	6	43	.....	49
Asphaltic Concrete Streets.					
Square yards of roadway sanded...	20,700	.....	.....	.....	20,700
Cubic yards of washouts on wings filled in	24	.....	.....	.....	24
Square yards of gutters cleaned....	5	.....	.....	.....	5
Trees, Weeds and Snow.					
Cubic yards of snow removed from streets	57,268	.....	.....	404	57,672
Square yards of street cleaned of snow	95,879	.....	.....	.....	95,879
Cubic yards of snow removed from fire hydrants	3,424	.....	.....	.....	3,424
Cubic yards of snow removed from crosswalks	1,357	.....	.....	.....	1,357
Linear feet of gutters cleaned of snow	49,490	.....	.....	.....	49,490
Cubic yards snow removed from bridges	3,495	.....	.....	.....	3,495
Square yards of slippery pavement sanded	5,400	.....	.....	.....	5,400
Square yards of snow removed from crosswalks	34,418	.....	.....	.....	34,418
Number of dead trees cut down and removed	10	1	19	1	31
Square yards of weeds cut down and removed	550	5	139,476	166,691	306,722
Cubic yards of ice cut and removed.	109	.....	.....	.....	109

PERMITS ISSUED, 1914.

Permits to open streets to tap water pipes.....	1,738
Permits to open streets to repair water connections.....	446
Permits to open streets to make sewer connections.....	1,614
Permits to open streets to repair sewer connections.....	190
Permits to place building material on streets.....	477
Permits to construct street vaults.....	285
Permits, special	585
Permits to construct sheds.....	6
Permits to cross sidewalks.....	407

PERMITS ISSUED, 1914—Continued.

Permits to erect awnings.....	11
Permits for subways, steam mains and various connections.....	417
Permits for railway construction and repairs.....	66
Permits to repair sidewalks.....	600
Removing trees and shrubbery from street.....	....
Permits for new sewer connections.....	1,617
Permits for other purposes (private sewers).....	42
Permits for old sewer connections (repairs).....	191
Total	8,692

PERMITS.

Comparative statement of Moneys received for the issuing of Permits as shown in the tables below:

FOR THE BUREAU OF HIGHWAYS.

	1911.	1912.	1913.	1914.
1st Quarter	\$5,458.28	\$6,864.86	\$7,290.45	\$6,014.44
2nd Quarter	2,694.30	3,984.63	15,636.28	16,521.00
3d Quarter	3,931.46	5,358.59	10,831.70	14,561.99
4th Quarter	4,228.74	4,999.21	11,618.25	24,550.95
Total	\$16,312.78	\$21,207.29	\$45,376.68	\$61,651.38

FOR THE BUREAU OF SEWERS.

	1911.	1912.	1913.	1914.
1st Quarter	\$4,785.68	\$2,077.72	\$3,619.94	\$2,315.00
2nd Quarter	6,343.41	5,304.51	6,642.28	4,599.57
3d Quarter	4,768.91	5,270.44	2,515.00	3,547.25
4th Quarter	7,685.79	5,837.87	3,612.60	3,170.00
Total	\$23,601.79	\$18,490.54	\$16,389.82	\$13,631.82

**DIVISION OF ENGINEERING—
CONSTRUCTION**

DIVISION OF ENGINEERING—CONSTRUCTION.

Long Island City,

JAMES A. DAYTON, *Esq.*,
Commissioner of Public Works,
 Borough of Queens:

SIR—I have the honor to submit herewith a report of the work of the Bureau of Engineering Construction for the year ending 1914.

The report contains information almost entirely about the design and construction of new work. That dealing with sewers is from records on file in the office of Harold Tait, Assistant Engineer, the data relating to highway construction and supplies for highway maintenance is from records in the files of Assistant Engineer James J. Blake, and that regarding Chemical Analysis, Physical Tests and Bacteriological work from reports and data in files of Mr. P. M. Travis, Chemist in Charge of Laboratory.

Respectfully submitted,

JAMES RICE,
Engineer in Charge,
Engineering Construction.

Report of Bureau of Engineering Construction of total work done by contract in the construction of sewers and work incidental thereto for the year ending December 31, 1914:

There have been constructed:		Cost Incurred.
353.1	lin. ft. timber outlet sewer (43d Street).....	\$7,102.00
323	lin. ft. 13 ft. 9 in. x 8 ft. 0 in. concrete sewer.....	29,393.00
74.	lin. ft. 12 ft. 6 in. reinforced concrete sewer on each.....	2,220.00
142.	lin. ft. 10 ft. 6 in. x 8 ft. 6 in. twin reinforced concrete sewer	2,840.00
2.61	lin. ft. 7 ft. 6 in. x 7 ft. 7¼ in. reinforced concrete sewer....	65.25
5.	lin. ft. 9 ft. 0 in. reinforced concrete sewer.....	236.70
807.	lin. ft. 8 ft. 6 in. reinforced concrete sewer.....	13,904.61
697.74	lin. ft. 8 ft. 0 in. x 7 ft. 0 in. twin reinforced concrete sewer	18,459.40
1,233.	lin. ft. 8 ft. 0 in. reinforced concrete sewer.....	18,668.07
2.61	lin. ft. 7 ft. 6 in. x 7 ft. 7¼ in reinforced concrete sewer....	65.25
276.22	lin. ft. 7 ft. 6 in. x 7 ft. 0 in. reinforced concrete sewer.....	8,472.07
1,089.10	lin. ft. 7 ft. 6 in. reinforced concrete sewer.....	28,709.91
763.90	lin. ft. 7 ft. 0 in. x 5 ft. 6 in. reinforced concrete sewer.....	13,253.67
1,845.6	lin. ft. 7 ft. 0 in. reinforced concrete sewer.....	25,582.93
905.8	lin. ft. 6 ft. 6 in. reinforced concrete sewer.....	10,869.60
35.	lin. ft. 5 ft. 7 in. x 3 ft. 8¾ in. reinforced concrete sewer....	361.90
1,391.38	lin. ft. 5 ft. 6 in. reinforced concrete sewer.....	17,646.40
252.53	lin. ft. 5 ft. 3 in. reinforced concrete sewer.....	2,651.57
4,220.	lin. ft. 5 ft. 0 in. reinforced concrete sewer.....	36,677.40
159.83	lin. ft. 4 ft. 9 in. reinforced concrete sewer.....	1,519.98
1,174.72	lin. ft. 4 ft. 6 in. reinforced concrete sewer.....	11,384.96
250.20	lin. ft. 4 ft. 3 in. reinforced concrete sewer.....	2,001.60
646.89	lin. ft. 4 ft. 0 in. concrete sewer.....	5,563.21
386.90	lin. ft. 3 ft. 9 in. concrete sewer.....	2,283.40
1,574.22	lin. ft. 3 ft. 6 in. concrete sewer.....	11,602.23

There have been constructed:		Cost Incurred.
929.48	lin. ft. 3 ft. 3 in. concrete sewer.....	5,159.60
2,836.58	lin. ft. 3 ft. 0 in. concrete sewer.....	15,463.01
1,040.40	lin. ft. 2 ft. 9 in. concrete sewer.....	6,788.16
1,284.07	lin. ft. 2 ft. 6 in. concrete sewer.....	7,004.21
4,939.64	lin. ft. 24 in. V. S. G. P. sewer.....	15,915.83
1,240.70	lin. ft. 22 in. V. S. G. P. sewer.....	4,316.07
3,293.20	lin. ft. 20 in. V. S. G. P. sewer.....	9,483.06
4,533.68	lin. ft. 18 in. V. S. G. P. sewer.....	11,885.14
3,010.59	lin. ft. 15 in. V. S. G. P. sewer.....	8,646.99
38,504.07	lin. ft. 12 in. V. S. G. P. sewer.....	61,155.08
965.95	lin. ft. 8 in. V. S. G. P. sewer.....	2,897.85
61,887.73	lin. ft. 6 in. V. S. G. P. for house connections.....	46,434.68
6,958.	lin. ft. 12 in. vitrified salt-glazed pipe for basin connections..	9,179.06
910.	lin. ft. 10 in. vitrified salt-glazed pipe for basin connections..	907.96
81.	lin. ft. 8 in. vitrified salt-glazed pipe for basin connections..	52.65
48.	lin. ft. 24 in. cast iron pipe sewer, Class B.....	720.00
24.	lin. ft. 18 in. cast iron pipe sewer.....	120.00
492.	lin. ft. 16 in. cast iron pipe sewer, including posts, etc.....	1,350.00
572.	lin. ft. 3 ft. 6 in. x 2 ft. 6 in. wooden box drain, including fill (Leavitt Park).....	1,001.00
814.	lin. ft. 3 ft. 0 in. x 2 ft. 6 in. wooden box drain (Leavitt Park)..	1,383.80
227.	lin. ft. railroad underpinning, etc. (51st Street).....	1,268.93
98,406.	lin. ft. piles	30,366.20
417.	lin. ft. cofferdam on 13 ft. 9 in. x 8 ft. 0 in. reinforced con- crete sewer (51st Street).....	17,227.00
434.	lin. ft. cofferdam on 12 ft. 6 in. reinforced concrete sewer on piles	11,800.00
54.	lin. ft. concrete reinforced on 12 ft. 6 in. reinforced concrete sewer on piles.....	1,620.00
125.	lin. ft. concrete reinforced on 12 ft. 6 in. reinforced concrete sewer	3,750.00
65.	lin. ft. concrete on 10 ft. 6 in. x 8 ft. 6 in. twin reinforced concrete sewer	1,300.00
1,818.	lin. ft. cast iron segments delivered on 12 ft. 6 in. tunnel sewer	87,264.00
1,883.	lin. ft. cast iron segments delivered on 11 ft. 0 in. tunnel sewer	84,212.00
3,264.	lin. ft. cast iron segments delivered on 8 ft. 0 in. tunnel sewer	78,336.00
717.	lin. ft. cast iron segments set on 12 ft. 6 in. tunnel sewer....	8,604.00
775.	lin. ft. cast iron segments set on 11 ft. 0 in. tunnel sewer....	9,300.00
2,276.	lin. ft. cast iron segments set on 8 ft. 0 in. tunnel sewer....	13,656.00
119.	lin. ft. fill on 12 ft. 6 in. reinforced concrete sewer on piles..	3,570.00
219.	lin. ft. fill on 12 ft. 6 in. reinforced concrete sewer on earth..	3,383.00
244.	lin. ft. excavation on 12 ft. 6 in. reinforced concrete sewer on piles	1,220.00
199.	lin. ft. excavation on 12 ft. 6 in. reinforced concrete sewer on piles	3,980.00
830.	lin. ft. excavation on 12 ft. 6 in. circular cast iron tunnel sewer	42,330.00
1,018.	lin. ft. excavation on 11 ft. 0 in. circular cast iron tunnel sewer	50,638.26
2,442.	lin. ft. excavation on 8 ft. 0 in. circular cast iron tunnel sewer	62,026.80

There have been constructed:		Cost Incurred.
307.	lin. ft. excavation on 10 ft. 6 in. x 8 ft. 6 in. twin reinforced concrete sewer	9,949.87
1,830.	lin. ft. grout for 8 ft. 0 in. cast iron tunnel sewer.....	5,490.00
703.	lin. ft. grout for 11 ft. 0 in. cast iron tunnel sewer.....	2,012.00
750.	lin. ft. grout for 12 ft. 6 in. cast iron tunnel sewer.....	3,000.00
86.	lin. ft. grout (extra) for 51st Street.....	688.00
8,401.	cu. yds. excavation, 51st Street.....	24,380.00
21,438.	cu. yds. excavation, 43d Street.....	30,013.20
1,347.	cu. yds. fill between Grit Chamber and retaining wall, 43d Street	673.50
30.	cu. yds. earth fill in place (Leavitt Park).....	15.00
4,680.	cu. yds. concrete at 51st Street (Outlet S. and Increaser, etc.)	37,440.00
741.20	cu. yds. concrete at Hayes Avenue shaft.....	5,700.00
474.10	cu. yds. concrete at Polk Avenue shaft.....	3,900.00
641.75	cu. yds. concrete at Kingsland Avenue shaft.....	6,555.00
517.57	cu. yds. concrete at Ditmars Avenue shaft.....	4,380.00
105.	cu. yds. concrete at Lurting Street chamber.....	5,500.00
2,599.	cu. yds. concrete at 43d Street	20,478.00
158.	cu. yds. rock	145.13
178,060.66	feet B. M. timber for foundation.....	8,182.56
727,020.79	feet B. M. timber, bracing 7 sheeting.....	27,670.24
100%	excavation, Lurting Street chamber	5,500.00
90%	excavation, Ditmars Avenue shaft	7,020.00
339,344.	pounds of steel.....	7,207.66
1	increaser, 6 ft. 6 in. to 7 ft. 0 in.....	100.00
1	increaser, 30 ft. long, on 13 ft. 9 in. twin reinforced concrete sewer	3,490.00
2	fender clusters	1,000.00
1	overflow chamber (Fulton Street, Fourth Ward Contract)....	1,054.00
1	reinforced concrete buttressed retaining wall (43d Street)..	2,530.00
	6 in. x 6 in. timber lattice bracing.....	1,500.00
100%	column, Kingsland Avenue shaft (51st Street).....	190.00
1	culvert, Leavitt Park.....	300.00
2	Y's, 8 in. x 8 in., 3 ft. long.....	8.00
16	Y's, 12 in. x 6 in., 3 ft. long.....	14.40
1	crossing under Long Island Railroad (Thedford Avenue Contract)	1,500.00
1	connection complete with 11 ft. 3 in. reinforced concrete sewer, Myrtle Avenue, Second Ward.....	600.00
1	screen and grit chamber (43d Street).....	6,000.00
90	risers for house connections.....	1,728.00
7	junction chambers	1,840.00
10	cleaning shafts	995.00
606	manholes	35,247.50
5	manholes for concrete sewers.....	1,250.00
1	manhole (shallow)	40.00
260	receiving basins	30,868.80
54	receiving basins, double.....	10,255.00
121	spurs on 5 ft. 0 in. reinforced concrete sewer.....	151.25
21	spurs on 3 ft. 9 in. concrete sewer.....	21.00
12	spurs on 3 ft. 6 in. concrete sewer.....	12.00
27	spurs on 3 ft. 0 in. concrete sewer.....	33.75
31	spurs on 2 ft. 6 in. concrete sewer.....	31.00
82	spurs on 24 in. V. S. G. pipe sewer.....	273.32

There have been constructed:		Cost Incurred.
55	spurs on 22 in. V. S. G. pipe sewer.....	342.10
224	spurs on 20 in. V. S. G. pipe sewer.....	647.80
69	spurs on 18 in. V. S. G. pipe sewer.....	191.70
67	spurs on 15 in. V. S. G. pipe sewer.....	32.24
1,591	spurs on 12 in. V. S. G. pipe sewer.....	1,304.31

\$1,316,702.85

The following sewers have been completed during 1914:

	Cost.
Sewer and appurtenances in <i>Murray Street</i> , from Franconia Avenue to Bayreuth Street; in <i>California Avenue</i> , from Murray Street to Crown, 385 feet east of Ziegler Avenue; in <i>Delaware Street</i> , from Murray Street to Ziegler Avenue, and in <i>Erie Street</i> , from Murray Street to Ziegler Avenue, Third Ward.....	\$8,305.04
Sewer and appurtenances in <i>Ralph Street</i> , from Seneca Avenue to Fairview Avenue, and in <i>Fairview Avenue</i> , from Ralph Street to Bleeker Street, Second Ward.....	9,491.36
Storm water sewer and appurtenances in <i>Queens Avenue</i> , from Elton (17th) Street to Parsons Avenue; <i>Ziegler (Central) Avenue</i> , from Queens Avenue to Bayreuth (Beech) Street; <i>Bayreuth Street</i> , from Ziegler Avenue to Wentworth (Wilson) Avenue; <i>California (Cypress) Avenue</i> , from Ziegler Avenue to Crown 385 feet east of Ziegler Avenue; <i>Franconia Avenue</i> , from Ziegler Avenue to Crown 210 feet east of Ziegler Avenue; <i>Georgia (Hawthorne) Avenue</i> , from Ziegler Avenue to the Crown 360 feet east of Ziegler Avenue; <i>Hyacinth Street (Hollywood Place)</i> , from Ziegler Avenue to Crown 260 feet east of Ziegler Avenue, Third Ward.....	12,907.60
Sewer and appurtenances in <i>Percy Street</i> , from Parsons Avenue to Beech Street; in <i>Cypress Avenue</i> , from Percy Street to Central Avenue; in <i>Delaware Street</i> , from Percy Street to Central Avenue, and in <i>Elm Street</i> , from Percy Street to Central Avenue, Third Ward.....	9,780.56
Sewer and appurtenances in <i>Cypress Avenue</i> , from Cooper Street to Vermont Avenue, Second Ward.....	20,103.26
Sewer and appurtenances in <i>Sixteenth Street</i> , from Franconia Avenue to Cypress Avenue; in <i>Cypress Avenue</i> , from 16th Street to Murray Street, and in <i>Delaware Street</i> , from 16th Street to Murray Street, Third Ward	3,813.63
Outlet sewer and appurtenances in <i>Division Avenue</i> , from a point on the shore on the approximately northern extension of the center line to a point about 492 feet to low water mark, Fifth Ward.....	1,350.00
Sewer and appurtenances in <i>Beaufort Avenue</i> , from Lefferts Avenue to Maure Avenue; in <i>Birch Street</i> , <i>Spruce Street</i> , <i>South Vine Street</i> , <i>South Crocheron Avenue</i> , and <i>South Villa Street</i> , from Beaufort Avenue to Chichester Avenue, Fourth Ward.....	12,628.06
Sewer and appurtenances in <i>Woodbine Street</i> , from Cypress Avenue to Seneca Avenue, Second Ward.....	1,466.63
Sewer and appurtenances in <i>Liberty Avenue</i> , from Lefferts Avenue to Nebraska Avenue, and in <i>South Curtis Avenue</i> , from Liberty Avenue to Atlantic Avenue, Fourth Ward.....	124,227.75
Receiving basins and appurtenances on the northerly corner of Woodward Avenue and Silver Street, Second Ward.....	193.00
Sewer and appurtenances in <i>Atlantic Avenue</i> , South Side, from Greenwood Avenue to Lefferts Avenue; <i>Chestnut Street</i> , from Atlantic Avenue to Chichester Avenue, and in <i>Cedar Avenue</i> , from the Crown 215 feet south of Atlantic Avenue, Fourth Ward.....	7,359.49

	Cost.
Temporary sewer and appurtenances in <i>Freedom Avenue</i> , from Rockaway Road to Liberty Avenue, and a sewer and appurtenances in <i>Freedom Avenue</i> , from Liberty Avenue to Jamaica Avenue, Fourth Ward	157,890.17
Receiving basin and appurtenances on the easterly corner of Cypress Avenue and Harmon Street, Second Ward.....	261.50
Receiving basins and appurtenances on <i>Onderdonk Avenue</i> , at the easterly corner of Suydam Street; at the easterly corner of Hart Street, Second Ward	355.50
Receiving basin and appurtenances on the southeast corner of Jackson Avenue and Honeywell Street, First Ward.....	300.00
Sewer and appurtenances in <i>Goodrich Street</i> , from Flushing Avenue to Hoyt Avenue, First Ward.....	1,248.30
Receiving basins and appurtenances on <i>Myrtle Avenue</i> , at the northeast corners of Fosdick Avenue, Lafayette Street and Tompkins Place, Second Ward	642.50
Sewer and appurtenances on <i>Jerome Avenue</i> , from Greenwood Avenue to Lefferts Avenue; in <i>Chestnut Street</i> , from Jerome Avenue to Chichester Avenue; <i>Cedar Avenue</i> , from Jerome Avenue to Beaufort Avenue; <i>Hamilton Avenue</i> , from Jerome Avenue to Chichester Avenue; <i>Walnut Street</i> , from Jerome Avenue to Chichester Avenue; <i>Briggs Avenue</i> , from Jerome Avenue to Chichester Avenue; <i>Church Street</i> , from Jerome Avenue to Chichester Avenue, Fourth Ward...	20,406.96
Sewer and appurtenances in <i>Onderdonk Avenue</i> , from Troutman Street to Suydam Street, and in <i>Starr Street</i> , from Onderdonk Avenue to Borough Line, Second Ward.....	4,939.62
Sewer and appurtenances in <i>Thompson Avenue</i> , from Orton Street to Van Dam Street, First Ward.....	3,216.80
Sewer and appurtenances in <i>Forest Avenue</i> , from Putnam Avenue southerly to Putnam Avenue northerly, and in <i>Putnam Avenue</i> , from Forest Avenue to Buchman Avenue, Second Ward.....	4,070.55
For laying six-inch pipe for house connection drains (where not already laid) in <i>Academy Street</i> , from Graham Avenue to Broadway, First Ward	1,311.50
Sewer and appurtenances in <i>Franconia Avenue</i> , from 17th Street to the Crown 210 feet east of Central Avenue; in <i>Sixteenth Street</i> , from Franconia Avenue to Hawthorne Street; in <i>Hawthorne Street</i> , from 16th Street to the Crown 350 feet east of Central Avenue, Ingleside, Third Ward	6,017.33
Sewer and appurtenances in <i>Duchess (16th) Street</i> , from California (Cypress) Avenue to Sanford Avenue; in <i>Sanford Avenue</i> , from Duchess Street to Boerum Avenue; <i>Custer Street</i> , from Beech Street to Sanford Avenue; <i>Murray Street</i> , from Beech Street to Sanford Avenue, and <i>Ash Street</i> , from Wentworth (Wilson) Avenue to Murray Street, Ingleside, Third Ward.....	13,880.57 *
For laying six-inch pipe for house connection drains (where not already laid) and for the construction of three manholes on the line of the existing sewer in <i>Hughes Street</i> , between Anthon Avenue and Buchman Avenue, Second Ward.....	276.00
Sewer and appurtenances in <i>Madison Street</i> , from Woodward Avenue to Forest Avenue, Second Ward.....	1,734.19
Sewer and appurtenances in <i>Fairview Avenue</i> , from Putnam Avenue to Woodbine Street, Second Ward.....	750.64
Temporary park basins at the southeast corner of Pleasant Avenue and Burroughs Avenue, Fifth Ward.....	104.25

	Cost
Temporary park inlet basins on the southwest corner of Oceanus Avenue and Lefferts Place and on the northeast and southwest corners of Division Avenue and Burroughs Avenue, Fifth Ward.....	156.40
Receiving basins and appurtenances on the four corners of Hancock Street and Bodine Street, First Ward.....	558.00
Receiving basins and appurtenances on the northeast, northwest and southwest corners of Thompson Avenue and Court Street, First Ward...	1,321.36
Sewer and appurtenances in <i>Liberty Avenue</i> , from Stoothoff Avenue to Chestnut Street; in <i>Cedar Avenue</i> , from Liberty Avenue to Kimball Avenue, and in <i>Chestnut Street</i> , from Liberty Avenue to Kimball Avenue, Fourth Ward.....	4,618.00
Receiving basins and appurtenances on <i>Harris Avenue</i> : At the north and east corners of Hancock Street; at the north and east corners of The Boulevard; at the east corner of Sherman Street; at the east corner of Marion Street, and at the south corner of Marion Place, First Ward.....	1,561.00
Sewer and appurtenances in <i>Chichester Avenue</i> , from Freedom Avenue to Ocean Avenue, East Side, and in <i>Lawn Avenue</i> , from Chichester Avenue to Beaufort Avenue, Fourth Ward.....	2,555.04
Sewer and appurtenances in <i>Sherman Street</i> , from Camelia Street to Elm Street, and from Temple Street to Grand Avenue, and to lay six-inch pipe for house connection drains in <i>Sherman Street</i> , from Broadway to Camelia Street, and from Elm Street to Temple Street, First Ward	2,758.30
Sewer and appurtenances in <i>Fulton Street</i> , from Vanderveer Avenue to Ocean View Avenue, and in <i>Ocean View Avenue</i> , from Fulton Street to Ridgewood Avenue, Fourth Ward.....	20,202.48
Sewer and appurtenances in <i>Spruce Street</i> , from Jamaica Avenue to St. Anns Avenue, and in <i>St. Anns Avenue</i> , from Birch Street to Brevoort Street, Fourth Ward.....	8,244.41
Sewer and appurtenances in <i>Kimball Avenue</i> , from Freedom Avenue to Hatch Avenue; in <i>Ocean Avenue</i> , West Side, from Kimball Avenue to Jerome Avenue; in <i>Thedford Avenue</i> , from Kimball Avenue to Jerome Avenue; in <i>Hatch Avenue</i> , from Kimball Avenue to Jerome Avenue, and in <i>Jerome Avenue</i> , from Ocean Avenue, West Side, to Hatch Avenue, Fourth Ward.....	14,187.74
Sewer and appurtenances in <i>Harmon Street</i> , from Forest Avenue to Grandview Avenue, Second Ward.....	3,431.09
Sewer and appurtenances in <i>Ridgewood Avenue</i> , from Hamilton Avenue to Lefferts Avenue; <i>Stoothoff Avenue</i> , from Jamaica Avenue to Ridgewood Avenue; <i>Hamilton Avenue</i> , from Ridgewood Avenue to point 200 feet north of Fulton Street; <i>Walnut Street</i> , from Jamaica Avenue to a point 200 feet north of Fulton Street; <i>Briggs Avenue</i> , from Jamaica Avenue to a point 225 feet north of Fulton Street, and in <i>Church Street</i> and <i>Lefferts Avenue</i> , from Jamaica Avenue to Fulton Street	26,174.57
Combined sewer and appurtenances in <i>Parsons Avenue</i> , from Queens Avenue to Oak Avenue, Third Ward.....	10,933.28
Sewer and appurtenances in: <i>Parsons Avenue</i> , from Queens Avenue to Beech Street; <i>Beech Street</i> , from Parsons Avenue to Percy Street; <i>Cypress Avenue</i> , from Parsons Avenue to Percy Street; <i>Delaware Street</i> , from Parsons Avenue to Percy Street; <i>Franconia Avenue</i> , from Parsons Avenue to Central Avenue; <i>Hawthorne Street</i> , from Parsons Avenue to Central Avenue, Ingleside, Third Ward.....	17,482.56

	Cost.
Sewer and appurtenances in <i>Madison Street</i> , from Myrtle Avenue to Wyckoff Avenue; in <i>Wyckoff Avenue</i> , from Madison Street to Halsey Street, and in <i>Halsey Street</i> , from Wyckoff Avenue to Irving Avenue, Second Ward	34,815.77
Sanitary sewer and appurtenances in <i>Redfern Avenue</i> , from McNeil Avenue to Leland Place and a temporary sanitary sewer in <i>Leland Place</i> , from Redfern Avenue to the Sewage Purification Plant, Fifth Ward.	28,527.64
Sewer and appurtenances in <i>Beaufort Avenue</i> , from Freedom Avenue to Hatch Avenue; in <i>Hatch Avenue</i> , from Beaufort to Jerome Avenue; in <i>Thedford Avenue</i> , from Beaufort Avenue to Jerome Avenue, and in <i>Shattuck Avenue</i> , from Hatch Avenue to Thedford Avenue, Fourth Ward	21,016.99
Temporary basins on the southeast corner of 19th Street and Bayside Avenue and the southwest corner of 19th Street and 14th Avenue, at Whitestone, Third Ward.....	349.72
Sewer and appurtenances in <i>Twelfth Avenue</i> , from Vandeventer Avenue to the existing sewer about 475 feet south of Wilson Avenue, First Ward	1,303.65
Sewer and appurtenances in <i>Hancock Street</i> , from Cypress Avenue to Wyckoff Avenue, Second Ward.....	2,243.20
Sewer and appurtenances in <i>Thedford Avenue</i> , from Beaufort Avenue to Chichester Avenue; <i>Chichester Avenue</i> , from Thedford Avenue to Vanderveer Avenue, and in <i>Vanderveer Avenue</i> , from Chichester Avenue to Fulton Street, Fourth Ward.....	28,881.73
Sewer and appurtenances in <i>Wyckoff Avenue</i> from Halsey Street to the Manhattan Beach Division of the L. I. R. R. Co., Second Ward.....	6,720.75
Temporary dry weather flow sewer in the line of <i>Forty-third Street</i> , from the Pierhead Line to the Bulkhead Line; a sewer and appurtenances in <i>Forty-third Street</i> , from the Bulkhead Line of Flushing Bay to Ditmars Avenue and a temporary grit and screening chamber in <i>Forty-third Street</i> , and a sewer and appurtenances in <i>Ditmars Avenue</i> (<i>Bayside Terrace</i>), from Forty-third Street to Fifty-first Street, Second Ward	241,072.35
Temporary drain and appurtenances from a point near the intersection of Batavia Street and Leavitt Park, through Leavitt Park to a point on Bayside Avenue 100 feet east of Batavia Street, Third Ward.....	3,496.80
	<hr/> \$911,645.59

The following assessment maps and lists were forwarded to the Board of Assessors during the year 1914: Total Cost.

Receiving basins on the southerly side of Borden Avenue opposite Heyward Street, etc., First Ward.....	\$1,862.00
Sewer and appurtenances in <i>Orton Street</i> , from Thomson Avenue to Hunters Point Avenue, etc., First Ward.....	174,044.82
Sewer and appurtenances in <i>Nott Avenue</i> , from Van Dam Street to Hulst Street, etc., First Ward.....	24,860.20
Sewer and appurtenances in Hunters Point Avenue, from Greenpoint Avenue to Van Pelt Street, First Ward.....	31,017.20
To lay six-inch pipe for house connection drains in <i>Woolsey Avenue</i> , from Steinway Avenue to Second Avenue.....	1,794.52
To lay six-inch pipe for house connections in <i>George Street</i> , from Wyckoff Avenue to Cypress Avenue, Second Ward.....	386.36
Sewer and appurtenances in <i>Pierce Avenue</i> , from Third Avenue to Fourth Avenue, First Ward.....	634.36

	Total Cost.
Sewer and appurtenances in <i>Potter Avenue</i> , from Lawrence Street to Second Avenue, First Ward.....	708.97
Sewer and appurtenances in <i>Jackson Avenue</i> , easterly side, from South Washington Place to Skillman Place, First Ward.....	1,567.89
Sewer and appurtenances in <i>Hulst Street</i> , from Greenpoint Avenue to Anable Avenue, First Ward.....	2,420.81
Sewer and appurtenances in <i>Marion Street</i> , from Webster Avenue to Paynter Avenue, First Ward.....	3,346.44
Sewer and appurtenances in <i>Skillman Avenue</i> , from Hunter Avenue to Jackson Avenue, First Ward.....	422.53
Sewer and appurtenances in <i>Sunswick Street</i> , from Wilbur Avenue to North Jane Street, First Ward.....	1,257.10
Sewer and appurtenances in <i>Hamilton Avenue</i> , from Liberty Avenue to Jerome Avenue, etc., Fourth Ward.....	18,576.94
Sewer and appurtenances in <i>Hancock Street</i> , from Webster Avenue to the crown north of Pierce Avenue, etc., First Ward.....	16,822.32
Sewer and appurtenances in <i>Flushing Avenue</i> , from Metropolitan Avenue to Caspian (Atlantic) Street, Second Ward.....	16,315.54
To lay six-inch pipe for house connections in <i>Webster Avenue</i> , from Vernon Avenue to William Street, First Ward.....	536.90
Sewer and appurtenances in <i>Radde Street</i> , from Webster Avenue to the crown 250 feet north of Pierce Avenue, First Ward.....	4,541.22
Sewer and appurtenances in <i>Dutch Kills Place</i> , from Meadow Street to Nott Avenue, etc., First Ward.....	5,618.54
Receiving basins on <i>Lefferts Avenue</i> as follows: Northwest and southwest corners of Roanoke Avenue, etc., Fourth Ward.....	1,388.91
Receiving basin on the easterly corner of <i>Willow Street</i> and <i>Franklin Street</i> , First Ward	217.02
Sewer and appurtenances in <i>Freedom Avenue</i> , from Rockaway Road to Liberty Avenue, and a sewer and appurtenances in <i>Freedom Avenue</i> , from Liberty Avenue to Jamaica Avenue, First Ward.....	165,516.20
Sewer and appurtenances in <i>Chichester Avenue</i> , from Greenwood Avenue to Lefferts Avenue, etc., Fourth Ward.....	15,437.08
Sewer and appurtenances in <i>Lefferts Avenue</i> , from Liberty Avenue to Atlantic Avenue, Fourth Ward.....	10,266.98
Sewer and appurtenances in <i>Percy Street</i> , from Parsons Avenue to Beech Street, etc., Third Ward.....	10,591.31
Sewer and appurtenances in <i>Jerome Avenue</i> , from Ocean Avenue, East Side, to Greenwood Avenue, etc., Fourth Ward.....	31,712.78
Sewer and appurtenances in <i>Ditmars Avenue</i> , from the East River to Crescent Street, First Ward.....	7,566.01
Temporary sewer and appurtenances in <i>Fifteenth Street</i> , from High Street to Schleicher Court, Third Ward.....	1,802.01
Re-building and improving outlet of the Broadway sewer from Vernon Avenue to East River, First Ward.....	10,398.40
Sewer and appurtenances in <i>Queens Avenue</i> , from Elton (17th Street to Parsons Avenue, etc., Third Ward.....	14,556.49
Sewer and appurtenances in <i>Sixteenth Street</i> , from Queens Avenue to Hawthorne Street, etc., Third Ward.....	3,157.46
Sewer and appurtenances in <i>Queens Avenue</i> , from Elton (17th) Street to crown 210 feet east of Central Avenue, Third Ward.....	6,718.09
Sewer and appurtenances in <i>Murray Street</i> , from Franconia Avenue to Bayreuth Street, etc., Third Ward.....	9,068.32
Sewer and appurtenances in <i>Sixteenth Street</i> , from Franconia Avenue to Cypress Avenue, etc., Third Ward.....	4,271.74

	Total Cost.
Sewer and appurtenances in <i>Forest Avenue</i> , from Putnam Avenue, south- erly, etc., Second Ward.....	4,623.03
Sewer and appurtenances in <i>Elton Street</i> , from California Avenue to San- ford Avenue, Third Ward.....	1,809.84
Sewer and appurtenances in <i>Atlantic Avenue</i> , South Side, from Green- wood Avenue to Lefferts Avenue, etc., Fourth Ward.....	8,395.24
Sewer and appurtenances in <i>Ralph Street</i> , from Seneca Avenue to Fair- view Avenue, etc., Second Ward.....	10,749.80
Sewer and appurtenances in <i>Onderdonk Avenue</i> , from Troutman Street to Suydam Street, etc., Second Ward.....	5,856.21
Sewer and appurtenances in <i>Woodbine Street</i> , from Cypress Avenue to Seneca Avenue, Second Ward.....	1,648.16
Sewer and appurtenances in <i>Liberty Avenue</i> , from Stoothoff Avenue to Chestnut Street, Fourth Ward.....	5,354.17
Sewer and appurtenances in <i>Jerome Avenue</i> , from Greenwood Avenue to Lefferts Avenue, Fourth Ward.....	22,187.48
Sewer and appurtenances in <i>Cypress Avenue</i> , from Cooper Street to Ver- mont Avenue, Second Ward.....	24,245.44
Sewer and appurtenances in <i>Academy Street</i> , from Graham Avenue to Broadway, First Ward	1,562.96
Sewer and appurtenances in <i>Liberty Avenue</i> , from Lefferts Avenue to Nebraska Avenue, etc., Fourth Ward.....	129,893.12
Sewer and appurtenances in <i>Jerome Avenue</i> , from Lefferts Avenue to Maure Avenue, etc., Fourth Ward.....	19,493.24
Sewer and appurtenances in <i>Beaufort Avenue</i> , from Lefferts Avenue to Maure Avenue, etc., Fourth Ward.....	13,594.82
Receiving basin on the northwest corner of Washington Avenue and Seventh Avenue, First Ward.....	231.75
Receiving basins on the northwest and southwest corner of Fulton Street and Spruce Street, etc., Fourth Ward.....	705.37
Sewer and appurtenances in <i>Thomson Avenue</i> , from Orton Street to Van Dam Street, Fourth Ward.....	3,629.07
Laying six-inch pipe for house connections (where not already laid) and for three manholes on the line of the existing sewer in <i>Hughes Street</i> , between Anthon Avenue and Buchman Avenue, Sec- ond Ward	381.21
Temporary catch basin at the southeast corner of Jamaica Avenue and Walker Avenue (I Place), etc., Fourth Ward.....	1,083.36
Sewer and appurtenances in <i>Fairview Avenue</i> , from Putnam Avenue to Woodbine Street, Second Ward.....	1,043.43
Sewer and appurtenances in <i>Madison Street</i> , from Woodward Avenue to Forest Avenue, Second Ward.....	2,061.97
Receiving basins on <i>Harris Avenue</i> : On the northerly and easterly cor- ners of Hancock Street. On the northerly and easterly corners of The Boulevard, etc., First Ward.....	1,798.44
To lay six-inch pipe for house connections in <i>Hopkins Avenue</i> , from Grand Avenue to Taylor Street, First Ward.....	108.29
Sewer and appurtenances in <i>Duchess (16th) Street</i> , from California (Cypress) Avenue to Sanford Avenue, etc., Third Ward.....	15,378.08
Sewer and appurtenances in <i>Hancock Street</i> , from Cypress Avenue to Wyckoff Avenue, Second Ward.....	2,685.96
Sewer and appurtenances in <i>Twelfth Avenue</i> , from Vandeventer Ave- nue to the existing sewer about 475 feet south of Wilson Avenue, First Ward	1,597.45

	Total Cost.
Sewer and appurtenances in <i>Redfern Avenue</i> , from McNeil Avenue to Leland Place, etc., Fifth Ward.....	31,132.88
Sewer and appurtenances in <i>Beaufort Avenue</i> , from Freedom Avenue to Hatch Avenue, etc., Fourth Ward.....	24,170.65
Sewer and appurtenances in <i>Thedford Avenue</i> , from Beaufort Avenue to Chichester Avenue, Fourth Ward.....	31,141.63
Total	\$965,996.51

There were constructed during the year 1914:

4.63 Miles of concrete and reinforced concrete sewers.

10.47 Miles of pipe sewers.

311 Receiving basins.

There are now in the Borough:

44.4794 Miles of brick and concrete sewers.

242.1835 Miles of pipe sewers.

3,060 Receiving basins.

12 to 15 Miles of open drain.

3 Sewage purification plants.

Report of Bureau of Engineering Construction of total work done by contract in the construction and maintenance of highways for the year ending December 31, 1914:

63,626.2	sq. yds. of asphaltic concrete pavement laid.
6,722.9	sq. yds. of asphalt block pavement laid.
55,176.90	sq. yds. of old granite block pavement relaid.
79,464.66	sq. yds. of sheet asphalt pavement laid.
35,355.4	sq. yds. of improved granite block pavement laid.
57.1	sq. yds. of vitrified brick pavement relaid.
35,733.8	sq. yds. of old granite block pavement furnished and laid.
100	sq. yds. of asphalt block pavement relaid.
23	sq. yds. of wood block pavement relaid.
15,862.1	sq. yds. of sheet asphalt pavement repaired.
1,177.23	tons of old granite block loaded on cars.
3,257.4	sq. yds. of old granite blocks purchased and removed by contractor.
41,726.32	cu. yds. of concrete foundation laid.
228,424	gals of oil spread upon road.
11,202.7	cu. yds. of broken stone placed for foundation.
130,955	cu. yds. of earth excavated.
665.3	cu. yds. of rock excavated.
54,027.4	cu. yds. of embankment furnished.
80,894.3	lin. ft. of new bluestone curb furnished and set.
27,105.30	lin. ft. of old bluestone curb reset.
65,139.35	lin. ft. of new cement curb set.
604	lin. ft. of old cement curb reset.
78,755.4	sq. ft. of new flagstone sidewalk furnished and laid.
367,739.25	sq. ft. of new cement sidewalk furnished and laid.
6,582.6	sq. ft. of old flagstone sidewalk relaid.
11,839.3	sq. ft. of new crosswalks furnished and laid.
1,681.2	sq. yds. of stone gutters furnished and laid.
1,504.6	sq. yds. of stone gutters relaid.
1,107	lin. ft. 24-in. drain pipe in place.
20	lin. ft. 24-in. cast iron pipe in place.
37	catch basins rebuilt.
16	new catch basins built.
23	catch basins adjusted.

3	sewer manholes adjusted.
2	new seepage basins built.
37	cu. yds. of gravel placed in crosswalks.
88.8	cu. yds. of broken stone placed in crosswalks.
5,250	lin. ft. of 12-in. vitrified drain pipe in place.
72	lin. ft. of 12-in. cast iron drain pipe in place.
1,998	lin. ft. of 18-in. vitrified drain pipe in place.
49.4	lin. ft. of iron fence reset.
696	lin. ft. of rail fence erected.
80.5	lin. ft. of pipe railing fence erected.
446.4	lin. ft. of 6-ft. board fence erected.
475	cu. ft. of cement steps in place.
39.4	cu. ft. of stone coping reset.
200	cu. yds. of concrete, placed in footings.
320	cu. yds. of rubble masonry in place.
4,622	M. ft. B. M. timber relaid.
463	sq. yds. of old rip rap relaid.
685	sq. yds. of new rip rap laid.
165	cu. yds. of concrete placed in sea wall.
250	cu. yds. of rubble masonry relaid in sea wall.
9,812.50	cu. yds. of sand furnished on contract.
170	M. wood blocks furnished on contract.
240,200	vitrified blocks furnished on contract.
26,121	cu. yds. of broken stone furnished on contract.
522,008	gals. of light road oil furnished on contract.
157,500	gals. of asphaltic oil furnished on contract.
11,832	gals. of bituminous road oil furnished on contract.
58,973	asphalt blocks furnished on contract.

Number of bids opened during the year 110, amounting to \$1,427,491.36.

Number of contracts completed during the year 87, amounting to \$826,495.07.

Number of assessment maps forwarded to the Board of Assessors during the year 84, amounting to \$846,990.00.

NOTE—The above list of completed contracts includes 34 of a miscellaneous character which do not necessitate the forwarding of assessment lists to the Board of Assessors. These include repavings, furnishing and delivering materials, etc.

ENGINEER'S OFFICE—BUREAU OF HIGHWAYS.

REPORT FOR YEAR 1914, INCLUDING ALL THE WARDS IN THE BOROUGH OF QUEENS.

Kind of Pavement.	Total Miles and Square Yards of Pavements in the Borough of Queens, December 31, 1913.			Pavement Laid in 1914.			Deduct for Change to a Different Kind of Pavement.			Total Miles and Square Yards of Pavements in the Borough of Queens, December 31, 1914.		
	Miles.		Sq. Yds.	New.		Repaved.	Miles.		Sq. Yds.	Miles.		Sq. Yds.
Asphaltic Concrete	86.52		881,845	6.74		92,730	.....	.....	.....	.....	93.26	974,575
Asphalt Sheet	24.17		390,911	3.36		61,665	.....	.....	.....	.....	27.81	457,576
Asphalt Sheet (Priv. Contr.) .....	.....		.....	0.28		5,000	.....	.....	.....	.....	.....	.....
Asphalt Block	23.85		474,616	0.29		8,923	.....	.....	.....	.....	24.14	483,539
Wood Block	9.30		170,216	.....		.....	.....	.....	.....	.....	9.30	170,216
Brick, Vit	12.28		205,295	.....		.....	.....	.....	.....	.....	11.35	188,735
Granite Block	34.15		609,809	1.50		27,151	.....	5.98	85,196	.....	35.65	636,960
Belgian Block	3.49		64,380	.....		.....	.....	0.44	8,258	.....	3.93	56,122
Iron Slag	0.22		2,200	.....		.....	.....	.....	.....	.....	0.22	2,200
Tarvia or Bit. Mac.	31.33		359,013	9.37		110,585	.....	1.06	11,266	.....	40.70	469,598
Macadam and Gravel	228.60		2,768,246	.....		.....	.....	6.46	99,320	.....	212.49	2,564,931
Totals	453.91		5,926,531	21.54		306,054	13.50		185,782	.....	457.97	6,004,452
Dirt Roads .....	.....		.....	.....		.....	.....	4.06	77,821	.....	600.00	.....

ENGINEER'S OFFICE—BUREAU OF HIGHWAYS.

REPORT FOR THE YEAR OF 1914 OF PAVED AND UNPAVED STREETS IN THE BOROUGH OF QUEENS.

Kind of Improvement.	First Ward.			Second Ward.			Third Ward.			Fourth Ward.			Fifth Ward.			Totals.		
	Miles.	Sq. Yds.	Miles.	Sq. Yds.	Miles.	Sq. Yds.	Miles.	Sq. Yds.	Miles.	Sq. Yds.	Miles.	Sq. Yds.	Miles.	Sq. Yds.	Miles.	Sq. Yds.	Miles.	Sq. Yds.
Asphaltic Concrete	0.85	10,500	25.35	278,074	30.87	322,963	30.72	304,846	5.47	58,192	93.26	974,575	5.47	58,192	93.26	974,575		
Asphalt Sheet	11.82	204,962	9.13	156,815	2.15	39,618	4.61	54,667	0.10	1,514	27.81	457,576	0.10	1,514	27.81	457,576		
Asphalt Block	23.34	463,294	0.65	11,969	0.15	8,276	...	...	...	...	24.14	483,539	...	...	24.14	483,539		
Wood Block	2.75	51,171	1.92	25,815	3.57	73,614	1.06	19,616	...	...	9.30	170,216	...	...	9.30	170,216		
Brick Vit. ....	...	...	4.51	91,382	...	...	2.88	34,522	3.96	62,831	11.35	188,735	3.96	62,831	11.35	188,735		
Iron Slag	0.22	2,200	...	...	...	...	...	...	...	...	0.22	2,200	...	...	0.22	2,200		
Granite Block	6.20	160,157	24.47	391,088	0.84	10,233	4.12	75,062	0.02	420	35.65	636,960	0.02	420	35.65	636,960		
Belgian Block	1.97	38,496	0.41	5,787	0.07	1,225	0.60	10,604	...	...	3.05	56,122	...	...	3.05	56,122		
Tarvia or Bit. Mac. ....	...	...	10.44	116,719	12.33	149,136	17.30	196,848	0.63	6,895	40.70	469,598	0.63	6,895	40.70	469,598		
Macadam and Gravel	0.83	13,389	20.00	210,411	70.38	948,717	93.28	1,011,052	28.00	381,362	212.49	2,564,931	28.00	381,362	212.49	2,564,931		
Totals	47.98	944,169	96.88	1,288,070	120.36	1,553,782	154.57	1,707,217	38.18	511,214	457.97	6,004,452	38.18	511,214	457.97	6,004,452		
Dirt Roads, Approx.	108.00	.....	122.00	.....	100.00	.....	235.00	.....	35.00	.....	600.00	.....	35.00	.....	600.00	.....	
Grand Totals	155.90	.....	218.88	.....	220.36	.....	389.57	.....	73.18	.....	1057.97	.....	73.18	.....	1057.97	.....	

REPORT OF THE BUREAU OF ENGINEERING CONSTRUCTION OF WORK DONE BY THE CHEMICAL AND PHYSICAL TESTING LABORATORY FOR THE YEAR ENDING DECEMBER 31, 1914.

The Laboratory was opened in September, 1913, but a report of its operations was not included in the report of the Borough President of that year. It is equipped with modern apparatus for making chemical analysis, and the physical testing of materials used in work done by contract or purchased as supplies; also for bacteriological work in the sanitary investigations made in connection with the operation of the sewage disposal plants in the Borough of Queens. The work of this Division covers a broad field in scientific investigations. Samples of all materials used in constructing the drainage systems, highways, or other municipal work coming under the authority of the Borough President, are subjected to a chemical analysis, or physical test as required by the specification before being used in the work.

The laboratory force consisted of one Chemist, one Cement Tester and one Laborer until the latter part of the year when a Junior Chemist was added to the force.

The improvement in quality, and the reduction in cost of materials and supplies (this is especially marked in liquid soaps and lime used at sewage disposal plants) justifies the decision of the Borough President, Maurice E. Connolly, to add a Chemical and Physical Testing Laboratory to his organization.

Below is a list of tests made during the year ending December 31, 1914:

Cement Tests	396
Sand Tests	7
Asphaltic Base Road Oils.....	14
Tar for Road Surfacing.....	11
Limestone and Delomite analysis.....	2
Sheet Asphalt and Asphaltic Concrete.....	116
Paving Pitches and Asphaltic Cement.....	7
Asphaltic Block	3
Soap Analysis	8
Phenol Co-efficients of Disinfectants.....	8
Varnish Analysis	2
Cement Analysis	2
Lime Analysis	3
Analysis of Clinker From Incinerators.....	2
Steel Tests	6
Sanitary Water Analyses and Bacteriological Examination of Water.....	17
Analyses of Sewage, Including Chemical and Bacteriological.....	188

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